

(ISOCYANURATE OR ISOCYANURATES)
63 CHLORINATED ISOCYANURATE
(CHLORINATED (W) ISOCYANURATE)

L5

=> s trichlorocyanurate or dichlorocyanurate

6 TRICHLOROCYANURATE
1 TRICHLOROCYANURATES
7 TRICHLOROCYANURATE
(TRICHLOROCYANURATE OR TRICHLOROCYANURATES)
118 DICHLOROCYANURATE
9 DICHLOROCYANURATES
120 DICHLOROCYANURATE
(DICHLOROCYANURATE OR DICHLOROCYANURATES)
L6 127 TRICHLOROCYANURATE OR DICHLOROCYANURATE

=> s L6 and polymer

992250 POLYMER
821725 POLYMERS
1345155 POLYMER
(POLYMER OR POLYMERS)

L7 19 L6 AND POLYMER

=> d 1-19 L7

L7 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:672962 CAPLUS

DN 131:288073

TI Toilet cleaning block compositions containing bleaching agents and heavy metal ions and their manufacture

IN Bolzoni, Giuseppe Vincenzo; Morris, Ronald Meredith; Oliva, Marco; Tummiolo, Roberto

PA Unilever PLC, UK; Unilever N. V.; Hindustan Lever Limited

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9953013	A1	19991021	WO 1999-EP1900	19990322
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2320776	AA	19991021	CA 1999-2320776	19990322
AU 9934167	A1	19991101	AU 1999-34167	19990322
BR 9909498	A	20001212	BR 1999-9498	19990322
EP 1071741	A1	20010131	EP 1999-915683	19990322

R: DE, ES, FR, GB, IT

PRAI EP 1998-302784 A 19980409

WO 1999-EP1900 W 19990322

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:672960 CAPLUS

DN 131:288072

TI Toilet cleaning block compositions containing bleaching agents

IN Bolzoni, Giuseppe Vincenzo; Morris, Ronald Meredith; Oliva, Marco; Tummiolo, Roberto

PA Unilever PLC, UK; Unilever N.V.; Hindustan Lever Limited

SO PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9953012	A1	19991021	WO 1999-EP1899	19990322
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2320170	AA	19991021	CA 1999-2320170	19990322
	AU 9934166	A1	19991101	AU 1999-34166	19990322
	BR 9909499	A	20001212	BR 1999-9499	19990322
	EP 1070114	A1	20010124	EP 1999-915682	19990322
	R: DE, ES, FR, GB, IT				
PRAI	EP 1998-302785	A	19980409		
	WO 1999-EP1899	W	19990322		

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:234360 CAPLUS

DN 130:241688

TI Organic fluid gelling compound

IN Vallieres, Lucien

PA Can.

SO Can. Pat. Appl., 17 pp.

CODEN: CPXXEB

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 2188838	AA	19980425	CA 1996-2188838	19961025
	CA 2188838	C	20010227		
PRAI	CA 1996-2188838		19961025		

L7 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:85573 CAPLUS

DN 126:148478

TI Organic fluid gelifying compounds

IN Vallieres, Lucien

PA Can.

SO U.S., 5 pp., Cont.-in-part of U.S. Ser. No. 216,015, abandoned.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5595731	A	19970121	US 1995-531677	19950921
	EP 839539	A1	19980506	EP 1996-402334	19961104
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	US 1994-216015	B2	19940321		

L7 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:590882 CAPLUS

DN 125:269850

TI Method for immobilizing dye on substrates

IN Gibboni, David J.; Law, Wai T.

PA Actimed Laboratories, Inc., USA

SO U.S., 10 pp., Cont.-in-part of U.S. Ser. No. 833, 423.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5556743	A	19960917	US 1994-243876	19940517
PRAI	US 1992-833423	B2	19920210		

L7 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1996:476833 CAPLUS
 DN 125:118136
 TI Metasilicate-rich automatic dishwashing compositions exhibiting good glass cleaning properties
 IN Caravajal, Gregory Stephen; Marshall, Janet Layne
 PA Procter and Gamble Company, USA
 SO PCT Int. Appl., 28 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9617047	A1	19960606	WO 1995-US15288	19951122
	W: CA, FI, NO				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5703027	A	19971230	US 1994-346560	19941129
	EP 795000	A1	19970917	EP 1995-942885	19951122
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	CA 2206040	C	20010220	CA 1995-2206040	19951122
PRAI	US 1994-346560	A	19941129		
	WO 1995-US15288	W	19951122		

L7 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1994:136085 CAPLUS
 DN 120:136085
 TI Polyphenylene ether-polyester copolymers and compatibilized molding compositions thereof
 IN Yates, John B., III; Angeli, Stephen R.; Smith, Gary F.; Whalen, David
 PA General Electric Co., USA
 SO Can. Pat. Appl., 48 pp.
 CODEN: CPXXEB
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 2082735	AA	19930624	CA 1992-2082735	19921112
PRAI	US 1991-812611	A	19911223		

L7 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1991:144806 CAPLUS
 DN 114:144806
 TI Compositions comprising polyphenylene ethers and reactive graft polymers
 IN Campbell, John Robert
 PA General Electric Co., USA
 SO Eur. Pat. Appl., 13 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 395993	A2	19901107	EP 1990-107728	19900424
	EP 395993	A3	19911016		
	R: DE, ES, FR, GB, IT, NL				
	US 4980415	A	19901225	US 1989-345868	19890501
	JP 03033151	A2	19910213	JP 1990-107723	19900425
PRAI	US 1989-345868	A	19890501		

L7 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:632274 CAPLUS
 DN 113:232274

TI Polyphenylene ether copolymers from epoxytriazine-capped polyphenylene
ethers
IN Brown, Sterling Bruce; Trent, John Spencer; Golba, Joseph Chester, Jr.;
Lowry, Richard Charles
PA General Electric Co., USA
SO Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	EP 374517	A2	19900627	EP 1989-121696	19891124
	EP 374517	A3	19920115		
	EP 374517	B1	19940126		
	R: DE, ES, FR, GB, IT, NL				
	US 5041504	A	19910820	US 1989-373079	19890629
	ES 2061898	T3	19941216	ES 1989-121696	19891124
	JP 02242824	A2	19900927	JP 1989-327490	19891219
	JP 06018887	B4	19940316		
	US 5100961	A	19920331	US 1991-676001	19910318
PRAI	US 1988-286184	A	19881219		
	US 1989-373079	A	19890629		

L7 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1990:236429 CAPLUS
DN 112:236429

TI Compositions comprising polyphenylene ether-polyester copolymers from
epoxytriazine-capped polyphenylene ethers
IN Brown, Sterling Bruce; Lowry, Richard Charles
PA General Electric Co., USA
SO Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW

DT Patent
LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	EP 347828	A2	19891227	EP 1989-111165	19890620
	EP 347828	A3	19910508		
	EP 347828	B1	19950524		
	R: DE, ES, FR, GB, IT, NL				
	US 5089566	A	19920218	US 1989-351903	19890515
	ES 2072275	T3	19950716	ES 1989-111165	19890620
	JP 02064150	A2	19900305	JP 1989-159846	19890623
	JP 07005726	B4	19950125		
	CA 2010141	AA	19901115	CA 1990-2010141	19900215
	US 5153267	A	19921006	US 1991-773797	19911009
PRAI	US 1988-210266	A	19880623		
	US 1989-351903	A	19890515		
	CA 1989-600114	A	19890518		

L7 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1988:495185 CAPLUS
DN 109:95185

TI Thickened aqueous dishwashing compositions
IN Fuchs, Albert James; Roselle, Brian Joseph
PA Procter and Gamble Co., USA
SO Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW

DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	EP 264975	A1	19880427	EP 1987-201496	19870806
	R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
	FI 8703551	A	19880219	FI 1987-3551	19870817
	AU 8777109	A1	19880225	AU 1987-77109	19870817
	DK 8704298	A	19880219	DK 1987-4298	19870818

PRAI US 1986-897682 A 19860818

L7 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1986:610385 CAPLUS
DN 105:210385
TI Shrinkproofing of wool
IN Inoe, Jujiro
PA Nakajima Spinning Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61179373	A2	19860812	JP 1985-18980	19850201
PRAI	JP 1985-18980		19850201		

L7 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1975:141559 CAPLUS
DN 82:141559
TI Felting and making nonshrinking textile goods containing keratin fibers
IN Bille, Heinz; Siemenc, Toni
PA BASF A.-G.
SO Ger. Offen., 15 pp.
CODEN: GWXXBX

DT Patent
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2326463	A1	19741219	DE 1973-2326463	19730524
PRAI	DE 1973-2326463	A	19730524		

L7 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1975:74286 CAPLUS
DN 82:74286
TI Effect of a change in the superamolecular structure of rayon fiber on the coloristic effectiveness of printing staple textiles with vat dyes
AU Lebedeva, V. I.; Mel'nikov, B. N.; Panina, Z. N.
CS Ivanov. Khim.-Tekhnol. Inst., Ivanovo, USSR
SO Izvestiya Vysshikh Uchebnykh Zavedenii, Tekhnologiya Tekstil'noi Promyshlennosti (1973), (5), 69-73
CODEN: IVTTAF; ISSN: 0021-3497

DT Journal
LA Russian

L7 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1971:465256 CAPLUS
DN 75:65256
TI Continuous antifelting of wool-containing textiles
IN Reincke, Klaus
PA Badische Anilin- & Soda-Fabrik AG
SO Ger. Offen., 8 pp.
CODEN: GWXXBX

DT Patent
LA German

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1957264	A	19710527	DE 1969-1957264	19691114
	US 3657228	A	19720418	US 1970-89098	19701112
PRAI	DE 1969-1957264	A	19691114		

L7 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1968:420638 CAPLUS
DN 69:20638
TI Synthetic resin binders for detergent beads
IN Shields, Gordon G.; Patterson, Charles B.
PA Purex Corp., Ltd.

SO U.S., 3 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3380922	A	19680430	US 1965-489761	19650923
PRAI	US 1965-489761	A	19650923		

L7 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1967:76869 CAPLUS
DN 66:76869
TI Black dyeing of synthetic fibers
PA Farbenfabriken Bayer A.-G.
SO Neth. Appl., 8 pp.
CODEN: NAXXAN

DT Patent
LA Dutch

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	NL 6603441		19661003		
	DE 1469721			DE	
	FR 1472844			FR	
	GB 1066406			GB	
PRAI	DD		19650330		

L7 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1965:464409 CAPLUS
DN 63:64409
OREF 63:11880a-c
TI Water-soluble bleaching compositions
IN Pickin, John H.
PA Colgate-Palmolive Co.
SO 25 pp.
DT Patent
LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 623266		19630201	BE	
PRAI	US		19620209		

L7 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1964:24232 CAPLUS
DN 60:24232
OREF 60:4346g-h, 4347a
TI Dry bleach compositions prepared by fluidized-bed coating of
polychlorocyanurates with inorganic salts
IN Morgenthaler, John H.; Parks, Thomas D.
PA Procter & Gamble Co.
SO 8 pp.
DT Patent
LA Unavailable

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3112274		19631126	US	19591124

=> d hist

(FILE 'HOME' ENTERED AT 08:54:26 ON 23 FEB 2005)

FILE 'CAPLUS' ENTERED AT 08:54:45 ON 23 FEB 2005

L1 84 S OXIDIZING AGENT IN POLYMER
L2 0 S OXIDISING AGENT IN POLYMER
L3 84 S OXIDIZING AGENT? IN POLYMER
L4 3 S OXIDIZING AGENT IN SILICONE
L5 63 S CHLORINATED ISOCYANURATE

L6 127 S TRICHLOROCYANURATE OR DICHLOROCYANURATE
L7 19 S L6 AND POLYMER

=> s L3 and L6
L8 0 L3 AND L6

=> s silicone polymer?
92579 SILICONE
64643 SILICONES
129990 SILICONE
(SILICONE OR SILICONES)
1737857 POLYMER?
81000 POLYMD
81000 POLYMD
(POLYMD)
29787 POLYMG
312499 POLYMN
8040 POLYMNS
313523 POLYMN
(POLYMN OR POLYMNS)
1800013 POLYMER?
(POLYMER? OR POLYMD OR POLYMG OR POLYMN)
L9 2247 SILICONE POLYMER?
(SILICONE(W) POLYMER?)

=> s L9 and L1
L10 0 L9 AND L1

=> s L9 and oxidizing agent?
118899 OXIDIZING
2 OXIDIZINGS
118900 OXIDIZING
(OXIDIZING OR OXIDIZINGS)
1450728 AGENT?
37202 OXIDIZING AGENT?
(OXIDIZING(W) AGENT?)
L11 2 L9 AND OXIDIZING AGENT?

=> d 1-2 L11

L11 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:512215 CAPLUS
DN 141:76726
TI Nanocapsules comprising a polysilsesquioxane-type **silicone polymer**, a cosmetic or pharmaceutical composition containing them, and a preparation process
IN Richart, Pascal
PA L'oreal, Fr.
SO Fr. Demande, 20 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI FR 2848879	A1	20040625	FR 2002-16388	20021220
PRAI FR 2002-16388		20021220		

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1959:20523 CAPLUS
DN 53:20523
OREF 53:3766i, 3767a-b
TI Organosilicon compounds
PA Midland Silicones Ltd.
DT Patent
LA Unavailable
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI GB 800754 19580903 GB

=> d hist

(FILE 'HOME' ENTERED AT 08:54:26 ON 23 FEB 2005)

FILE 'CAPLUS' ENTERED AT 08:54:45 ON 23 FEB 2005

L1 84 S OXIDIZING AGENT IN POLYMER
L2 0 S OXIDISING AGENT IN POLYMER
L3 84 S OXIDIZING AGENT? IN POLYMER
L4 3 S OXIDIZING AGENT IN SILICONE
L5 63 S CHLORINATED ISOCYANURATE
L6 127 S TRICHLOROCYANURATE OR DICHLOROCYANURATE
L7 19 S L6 AND POLYMER
L8 0 S L3 AND L6
L9 2247 S SILICONE POLYMER?
L10 0 S L9 AND L1
L11 2 S L9 AND OXIDIZING AGENT?

=> d 1-10 L1

L1 ANSWER 1 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:14475 CAPLUS
DN 142:117631
TI Polymer composition for encapsulation of electrode particles
IN Gozdz, Antoni S.; Loxley, Andrew L.; Pullen, Anthony E.
PA Al23 Systems, Inc., USA
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005000956	A2	20050106	WO 2004-US20393	20040623
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2005034993	A1	20050217	US 2004-876179	20040623
PRAI	US 2003-480535P	P	20030623		

L1 ANSWER 2 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:913901 CAPLUS
TI Conductive polymer solid electrolytic capacitor manufactured by improved impregnation of oxidant
IN Choi, Jae Hun
PA Partsnic Co., Ltd., S. Korea
SO Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7

DT Patent
LA Korean

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	KR 2002009967	A	20020202	KR 2000-43673	20000728
PRAI	KR 2000-43673		20000728		

L1 ANSWER 3 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:654733 CAPLUS
DN 141:179731

TI Reversible polymer hydrogel systems for medical uses
IN Ravi, Nathan
PA USA
SO U.S. Pat. Appl. Publ., 19 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004156880	A1	20040812	US 2003-706081	20031113
PRAI	US 2002-425764P	P	20021113		

L1 ANSWER 4 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:620701 CAPLUS
DN 141:296624
TI Epoxy Polymer Surface Roughness Modeling Based on Kinetic Studies of Wet
Chemical Treatments
AU Siau, Sam; Vervaet, Alfons; Van Calster, Andre; Swennen, Ives; Schacht,
Etienne
CS ELIS-TECG/IMEC, Univ. Gent, Ghent, 9000, Belg.
SO Journal of the Electrochemical Society (2004), 151(8), J54-J61
CODEN: JESOAN; ISSN: 0013-4651
PB Electrochemical Society
DT Journal
LA English
RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 5 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:495563 CAPLUS
DN 141:27219
TI Polymer granules for nonscratching and nondishing abrasives
IN Wachi, Hiroko; Kondo, Kiyotaka
PA Mitsui Chemicals Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004168931	A2	20040617	JP 2002-337939	20021121
PRAI	JP 2002-337939		20021121		

L1 ANSWER 6 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:951355 CAPLUS
DN 140:18396
TI Conducting polymer-grafted carbon material for fuel cell applications
IN Srinivas, Bollepalli
PA Columbian Chemicals Company, USA
SO PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003100883	A2	20031204	WO 2003-US16319	20030523
	WO 2003100883	A3	20040506		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

L1 ANSWER 7 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:571923 CAPLUS
DN 139:245744
TI Polymer-supported sulfinimidoyl chlorides: A convenient reagent for
oxidation of alcohols
AU Matsuo, Jun-ichi; Kawana, Asahi; Yamanaka, Hiroyuki; Kamiyama, Hiroaki
CS Center for Basic Research, The Kitasato Institute, Tokyo, 114-0003, Japan
SO Bulletin of the Chemical Society of Japan (2003), 76(7), 1433-1440
CODEN: BCSJA8; ISSN: 0009-2673
PB Chemical Society of Japan
DT Journal
LA English
OS CASREACT 139:245744
RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 8 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:425717 CAPLUS
DN 140:146617
TI Novel polymer-supported reagents for organic transformations in solution
AU Rademann, Joerg; Barth, Michael; Smerdka, Joachim; Weik, Steffen; Sorg,
Gerhard; Jung, Guenther
CS Diversity-Oriented Synthesis and Solid-Support Technology, Institute of
Organic Chemistry, Tuebingen University, Tuebingen, 72076, Germany
SO Innovation and Perspectives in Solid Phase Synthesis & Combinatorial
Libraries: Peptides, Proteins and Nucleic Acids--Small Molecule Organic
Chemistry Diversity, Collected Papers, International Symposium, 7th,
Southampton, United Kingdom, Sept. 18-22, 2001 (2002), Meeting Date 2001,
125-128. Editor(s): Epton, Roger. Publisher: Mayflower Worldwide Ltd.,
Kingswinford, UK.
CODEN: 69DYT7; ISBN: 0-9515735-4-3
DT Conference
LA English
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 9 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:239777 CAPLUS
DN 138:240145
TI Solid fuels and small-sized lightweight hybrid propellants
IN Hosoya, Fumio; Takishita, Yukio; Kuwahara, Takao; Onda, Toshio; Shibamoto,
Hidefumi
PA Hosoya Fireworks Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF

DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003089590	A2	20030328	JP 2001-275799	20010911
PRAI	JP 2001-275799		20010911		

L1 ANSWER 10 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:216996 CAPLUS
DN 138:246786
TI Synthesis of conducting polymers by vapor phase polymerization
IN Kim, Jin Yeol; Kim, Eung Ryul
PA Hanyang Hak Won Co., Ltd., S. Korea
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF

DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003082105	A2	20030319	JP 2001-280290	20010914
PRAI	JP 2001-280290		20010914		

=> s L1 and pharmaceutical?
 258571 PHARMACEUTICAL?
 L12 0 L1 AND PHARMACEUTICAL?

=> s L1 and Skin
 214877 SKIN
 9114 SKINS
 220083 SKIN
 (SKIN OR SKINS)
 L13 2 L1 AND SKIN

=> d 1-2 L13

L13 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:654733 CAPLUS
 DN 141:179731
 TI Reversible polymer hydrogel systems for medical uses
 IN Ravi, Nathan
 PA USA
 SO U.S. Pat. Appl. Publ., 19 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004156880	A1	20040812	US 2003-706081	20031113
PRAI	US 2002-425764P	P	20021113		

L13 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1996:641304 CAPLUS
 DN 125:284363
 TI Cosmetic melanins
 IN Pawelek, John M.; Platt, James T.
 PA Yale University, USA
 SO PCT Int. Appl., 34 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9625920	A1	19960829	WO 1996-US2163	19960214
	W: AU, BR, JP, KR, RU				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5744125	A	19980428	US 1995-392589	19950223
	AU 9649265	A1	19960911	AU 1996-49265	19960214
	AU 702553	B2	19990225		
	EP 820275	A1	19980128	EP 1996-905532	19960214
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
	BR 9607287	A	19980623	BR 1996-7287	19960214
	JP 11501341	T2	19990202	JP 1996-525766	19960214
PRAI	US 1995-392589	A	19950223		
	US 1993-109286	B2	19930819		
	WO 1996-US2163	W	19960214		

=> s L1 and cosmetic?
 68942 COSMETIC?
 L14 1 L1 AND COSMETIC?

=> d 1 L14

L14 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1996:641304 CAPLUS
 DN 125:284363
 TI Cosmetic melanins
 IN Pawelek, John M.; Platt, James T.

PA Yale University, USA
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9625920	A1	19960829	WO 1996-US2163	19960214
	W: AU, BR, JP, KR, RU				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5744125	A	19980428	US 1995-392589	19950223
	AU 9649265	A1	19960911	AU 1996-49265	19960214
	AU 702553	B2	19990225		
	EP 820275	A1	19980128	EP 1996-905532	19960214
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
	BR 9607287	A	19980623	BR 1996-7287	19960214
	JP 11501341	T2	19990202	JP 1996-525766	19960214
PRAI	US 1995-392589	A	19950223		
	US 1993-109286	B2	19930819		
	WO 1996-US2163	W	19960214		

=> d L1 11-20 IBIB ABs

L1 ANSWER 11 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:17440 CAPLUS
DOCUMENT NUMBER: 138:74644
TITLE: Manufacture of animal protein fibers showing low heat of wetting
INVENTOR(S): Fujiwara, Hisashi; Yamada, Hiroo
PATENT ASSIGNEE(S): Unitika Textile Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2003003374	A2	20030108	JP 2001-191205	20010625
PRIORITY APPLN. INFO.:				JP 2001-191205	20010625
AB	The fibers are manufactured by (a) treating surfaces of animal protein fibers with hydrophobic polymers or (b) reaction of fibers with epoxy polymers. Thus, wool was treated with Polymer PL (aminoacrylic copolymer), spun into yarn, and woven to give a fabric showing reduced heat generation on humidification and low shrinkage on laundering.				

L1 ANSWER 12 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:960908 CAPLUS
DOCUMENT NUMBER: 138:303661
TITLE: Polymer-supported hypervalent iodine reagents
AUTHOR(S): Togo, Hideo; Sakuratani, Kenji
CORPORATE SOURCE: Graduate School of Science and Technology, Department of Chemistry, Faculty of Science, Chiba University, Chiba, 263-8522, Japan
SOURCE: Synlett (2002), (12), 1966-1975
CODEN: SYNLES; ISSN: 0936-5214
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review. Polymer-supported hypervalent iodine reagents, bearing (diacetoxy)iodo, (dihalo)iodo, (hydroxy)(tosyloxy)iodo, (hydroxy)(phosphoryloxy)iodo, aryliodonium, 1,2-benziodoxol-3-one, and hypervalent iodine groups as counter anions, can be used for various oxidative functional group conversions of substrates. These polymer species can be recovered quant. by simple filtration, and can be regenerated and reused. Thus, these polymer-supported hypervalent iodine reagents are very useful, effective, and environmentally benign reagents

for organic synthesis.
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 13 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:764802 CAPLUS
DOCUMENT NUMBER: 138:4178
TITLE: Recoverable Catalysts and Reagents Using Recyclable
Polystyrene-Based Supports
AUTHOR(S): McNamara, Catherine A.; Dixon, Mark J.; Bradley, Mark
CORPORATE SOURCE: Department of Chemistry, Southampton University,
Highfield/Southampton, SO17 1BJ, UK
SOURCE: Chemical Reviews (Washington, DC, United States)
(2002), 102(10), 3275-3299
CODEN: CHREAY; ISSN: 0009-2665
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review including C-C bond formation using recyclable resin-based
reagents and catalysts, immobilized oxidants, and immobilized resin-based
reductants.
REFERENCE COUNT: 122 THERE ARE 122 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L1 ANSWER 14 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:725672 CAPLUS
DOCUMENT NUMBER: 137:294498
TITLE: High-performance polymer-type oxidizing agents
AUTHOR(S): Togo, Hideo; Sakuratani, Kenji
CORPORATE SOURCE: Faculty of Science, Chiba Univ., Chiba, 263-8522,
Japan
SOURCE: Kagaku to Kogyo (Tokyo, Japan) (2002), 55(9),
1018-1020
CODEN: KAKTAF; ISSN: 0022-7684
PUBLISHER: Nippon Kagakkai
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese
AB A review on oxidation reactions using recyclable oxidizing agents having
(diacetoxy)iodo or hydroxy(tosyloxy)iodo group bound to polystyrene.

L1 ANSWER 15 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:446144 CAPLUS
DOCUMENT NUMBER: 137:21283
TITLE: Packaging material and multilayer container with good
oxygen-barrier property
INVENTOR(S): Kikuchi, Atsushi; Komatsu, Ikuo; Yamada, Toshiki;
Kitano, Yoshihiro; Saito, Go
PATENT ASSIGNEE(S): Toyo Seikan Kaisha Limited, Japan
SOURCE: Eur. Pat. Appl., 35 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1213326	A1	20020612	EP 2001-310255	20011207
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AU 2001097111	A5	20020613	AU 2001-97111	20011206
US 2002115768	A1	20020822	US 2001-3228	20011206
JP 2002241608	A2	20020828	JP 2001-373200	20011206
US 2002146527	A1	20021010	US 2001-3055	20011206
US 6680094	B2	20040120		
CA 2364882	AA	20020608	CA 2001-2364882	20011207
AU 2001097149	A5	20020613	AU 2001-97149	20011207
JP 2003011283	A2	20030115	JP 2002-66728	20020312
US 2004176536	A1	20040909	US 2004-802718	20040318

PRIORITY APPLN. INFO.:

JP 2000-374947 A 20001208
JP 2001-130170 A 20010426
JP 2001-130181 A 20010426
US 2001-3228 A3 20011206

AB Disclosed is a packaging material having an oxygen-absorbing layer of a thermoplastic resin which is blended with an organic oxidizing component and with a transition metal catalyst, wherein the thermoplastic resin is not substantially oxidized in the presence of the transition metal catalyst. The thermoplastic resin is not deteriorated by oxidation and, hence, oxygen-barrier property is not deteriorated, making it possible to stably suppress the permeation of oxygen over extended periods of time. Thus, a resin composition was prepared by using a twin-screw extruder, the resin composition containing a T 600 (MXD6 polyamide) as a thermoplastic resin on which a Co neodecanoate had been deposited in an amount of 310 ppm calculated as Co, and 5% of M 2000-20 (maleated butadiene rubber) as an organic oxidizing component. An oxygen-absorbing film having a thickness of 20 μ m was prepared from the above resin composition. A PET film was laminated on one surface of the above film and a polypropylene film was laminated on the other surface thereof to obtain a multilayer film with excellent oxygen-barrier property.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 16 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:264466 CAPLUS

DOCUMENT NUMBER: 137:125778

TITLE: Synthesis and curing behaviors of a crosslinkable polymer from cashew nut shell liquid

AUTHOR(S): Ikeda, Ryohei; Tanaka, Hozumi; Uyama, Hiroshi; Kobayashi, Shiro

CORPORATE SOURCE: Japan Chemical Innovation Institute (JCII), Joint Research Center for Precision Polymerization (JRCP), Ibaraki, Tsukuba, 305-8565, Japan

SOURCE: Polymer (2002), 43(12), 3475-3481

CODEN: POLMAG; ISSN: 0032-3861

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In the present study, we have oxidatively polymerized cashew nut shell liquid(CNSL), whose main component is cardanol, a phenol derivative having a meta substituent of a C15 unsatd. hydrocarbon chain with one to three double bonds as the major, and examined the curing behaviors of the resulting polymer. Fe-salen efficiently catalyzed the polymerization in bulk at room temperature to give a soluble crosslinkable polymer in a good yield. Various metal complexes also catalyzed the polymerization at 80 °C, although their catalytic activity was lower than that of Fe-salen. The curing by cobalt naphthenate catalyst or thermal treatment took place to give the crosslinked film (artificial urushi) with high hardness and gloss surface. In the curing of polyCNSL by the thermal treatment, the crosslinking behaviors and properties of the resulting film were similar to those of a com. available CNSL-formaldehyde resin.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 17 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:120982 CAPLUS

DOCUMENT NUMBER: 137:5750

TITLE: Polymer-supported sulfinimidoyl chloride as a useful reagent for oxidation of various alcohols to the corresponding carbonyl compounds

AUTHOR(S): Matsuo, Jun-Ichi; Kawana, Asahi; Pudhom, Khanitha; Mukaiyama, Teruaki

CORPORATE SOURCE: Department of Applied Chemistry, Faculty of Science, Science University of Tokyo, Tokyo, 162-8601, Japan

SOURCE: Chemistry Letters (2002), (2), 250-251

CODEN: CMLTAG; ISSN: 0366-7022

PUBLISHER: Chemical Society of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:5750

AB Polymer-supported sulfinimidoyl chloride was prepared in four steps from chloromethyl polystyrene resin. Stoichiometric and catalytic oxidns. of various alcs. to the corresponding carbonyl compds. were carried out cleanly by using the prepared polymer-bound oxidant.

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 18 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:542938 CAPLUS

DOCUMENT NUMBER: 135:241214

TITLE: Preparative method for in vitro production of functional polymers from glutenin subunits of wheat

AUTHOR(S): Beasley, Helen L.; Blanchard, Chris L.; Bekes, Ferenc

CORPORATE SOURCE: Grain Quality Research Laboratory, CSIRO Plant Industry, North Ryde, 1670, Australia

SOURCE: Cereal Chemistry (2001), 78(4), 464-470
CODEN: CECHAF; ISSN: 0009-0352

PUBLISHER: American Association of Cereal Chemists

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An in vitro method for preparative-scale production of artificial glutenin polymers utilizes a controlled environment for the oxidation of glutenin subunits (GS) isolated from wheat flour to achieve high polymerization efficiency. The functionality of in vitro polymers was tested in a 2-g model dough system and was related to the treatment of the proteins before, during, and after in vitro polymerization. When added as the only polymeric component in a reconstituted model dough (built up from gliadin, water solubles, and starch fractions), in vitro polymers could mimic the behavior of native glutenin, demonstrating properties of dough development and breakdown. Manipulating the high mol. weight (HMW) GS to a low mol. weight (LMW)-GS ratio altered the mol. weight distribution of in vitro polymers. In functional studies using the 2-g mixograph, simple doughs built up from homopolymers of HMW-GS were stronger than those using homopolymers of LMW-GS. These differences may be accounted for, at least in part, by different polymer size distributions. The ability to control the size and composition of glutenin polymers shows the potential of this approach for investigating the effects of glutenin polymer size on dough function and flour end-use quality.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 19 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:443339 CAPLUS

DOCUMENT NUMBER: 136:153012

TITLE: Progress in research of polymer-supported oxidizing reagents

AUTHOR(S): Wu, Qinghu; Wang, Hui; Hu, Guowen

CORPORATE SOURCE: Department of Chemistry, Xianning Normal College, Xianning, 437005, Peop. Rep. China

SOURCE: Lizi Jiaohuan Yu Xifu (2001), 17(2), 187-192
CODEN: LJYXE5; ISSN: 1001-5493

PUBLISHER: Lizi Jiaohuan Yu Xifu Bianjibu

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Chinese

AB A review with refs. on the research progress of polymer-supported oxidizing reagents, and their use in organic synthesis.

L1 ANSWER 20 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:186482 CAPLUS

DOCUMENT NUMBER: 135:5561

TITLE: Solid-support-bound 1-aminoimidazolium chlorochromate: a selective, efficient and recyclable oxidant

AUTHOR(S): Linares, M. Lourdes; Sanchez, Nuria; Alajarin, Ramon; Vaquero, Juan J.; Alvarez-Builla, Julio

CORPORATE SOURCE: Departamento de Quimica Organica, Facultad de Farmacia, Universidad de Alcala, Alcala de Henares, Madrid, 28871, Spain

SOURCE: Synthesis (2001), (3), 382-388
CODEN: SYNTBF; ISSN: 0039-7881

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 135:5561
 AB A series of polymer-bound imidazolium chlorochromates have been synthesized and used as selective oxidants for benzyl and cinnamyl alcs. Solid-support-bound 1-aminoimidazolium chlorochromate proved to be the most convenient system due to its efficiency, selectivity and ease of recycling the material.
 REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 21-88 IBIB ABS

1 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE
 The answer numbers requested are not in the answer set.

ENTER ANSWER NUMBER OR RANGE (1):L1

ANSWER NUMBERS NOT CORRECTLY SPECIFIED

Enter an answer number, Example: 10
 several answer numbers, Example: 3,7,10
 a range of answer numbers, Example: 5-10
 or a combination of these. Example: 3,7,9-10,15
 ENTER ANSWER NUMBER OR RANGE (1):end

=> d L1 21-84 IBIB ABS

L1 ANSWER 21 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:152789 CAPLUS

DOCUMENT NUMBER: 134:182152

TITLE: Polymer- and surfactant-containing aqueous compositions for chemical mechanical polishing of semiconductor wafer substrates

INVENTOR(S): Costas, Wesley D.; Shen, James; Mandigo, Glenn C.; Thomas, Terence M.; Lack, Craig D.; Barker, Ross E., II

PATENT ASSIGNEE(S): Rodel Holdings, Inc., USA

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001014496	A1	20010301	WO 2000-US23052	20000823
W: JP, KR, SG				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6443812	B1	20020903	US 2000-634013	20000808
US 6607424	B1	20030819	US 2000-643578	20000822
EP 1210395	A1	20020605	EP 2000-955837	20000823
EP 1210395	B1	20031022		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
JP 2003507566	T2	20030225	JP 2001-518814	20000823
US 2002062600	A1	20020530	US 2001-925210	20010809
PRIORITY APPLN. INFO.:				
			US 1999-150443P	P 19990824
			US 2000-224686P	P 20000811
			WO 2000-US23052	W 20000823
			US 2000-233818P	P 20000920

AB Aqueous compns. for the polishing of semiconductor wafer substrates consists either of an organic polymer or a surfactant both having a backbone comprised of ≥ 16 carbon atoms and a plurality of moieties with affinity to surface groups on the semiconductor wafer surface. The compns. also contain 1-15 weight% oxidizing agent (such as hydrogen peroxide), 50-5000 ppm of an inhibitor (such as benzotriazole or tolyltriazole), ≤ 3 weight% carboxylic acid complexing agent (such as malic acid), up to 3 weight% abrasive particles (such as silica or diamond) and optionally a dispersant. The compns. provide improved wafers with reduced surface tension and surface roughness with decreased slurry/residue re-deposition

on the substrate surface.
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 22 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:143710 CAPLUS
DOCUMENT NUMBER: 134:194519
TITLE: Light-resistant articles and their manufacture
INVENTOR(S): Kodama, Tetsuo
PATENT ASSIGNEE(S): Toyobo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001055506	A2	20010227	JP 1999-230626	19990817
JP 3560227	B2	20040902		

PRIORITY APPLN. INFO.: JP 1999-230626 19990817
AB Articles obtained from substances which form colors by oxidation as raw materials are soaked in the substances for improvement in light resistance. Thus, a fabric of poly(p-phenylene benzobisoxazole) (Zylon) was dyed in a bath containing m- and p-phenylenediamine at 130° to give a test piece having retention of tensile strength (JIS L 1096-1990) after 100-h exposure to Xe lamp light.

L1 ANSWER 23 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:725476 CAPLUS
DOCUMENT NUMBER: 133:291106
TITLE: Immunomodulating polymers
INVENTOR(S): Tzianabos, Arthur O.; Kasper, Dennis L.; Onderdonk, Andrew B.; Wang, Ying
PATENT ASSIGNEE(S): Brigham and Women's Hospital, Inc., USA
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000059515	A2	20001012	WO 2000-US8586	20000331
WO 2000059515	A3	20010111		
WO 2000059515	C2	20020829		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2366895	AA	20001012	CA 2000-2366895	20000331
BR 2000009531	A	20011226	BR 2000-9531	20000331
EP 1169045	A2	20020109	EP 2000-919958	20000331

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2002541113	T2	20021203	JP 2000-609078	20000331
EP 1459757	A1	20040922	EP 2004-14020	20000331

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY

US 2004209818	A1	20041021	US 2004-848779	20040519
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PRIORITY APPLN. INFO.:
US 1999-127584P P 19990402
US 1999-162457P P 19991029
EP 2000-919958 A3 20000331

AB Methods and products for inducing IL-2 secretion, inducing IL-10 secretion, activating T cells, suppressing IgG antibody response to specific antigen, promoting allograft survival, reducing postoperative surgical adhesion formation, and protecting against abscess formation associated with surgery, trauma or diseases that predispose the host to abscess formation are provided. The methods of the invention are accomplished using an immunomodulator which is a polymer having at least two repeating charge motifs separated by at least a certain min. distance.

L1 ANSWER 24 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:628221 CAPLUS

DOCUMENT NUMBER: 133:245164

TITLE: A composition comprising a photo-oxidizing agent and uses of the agent

INVENTOR(S): Ortiz, Rafael; Kitko, David Johnathan; Burns, Michael Eugene; Heinzman, Stephen Wayne; Willey, Alan David; Jeffreys, Brian; Burckett-St Laurent, James Charles Theophile Roger; Vinson, Phillip Kyle; Trajano, Trace Wendell de Guzman

PATENT ASSIGNEE(S): Procter and Gamble Company, USA

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000052101	A1	20000908	WO 1999-US5795	19990317
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9930948	A1	20000921	AU 1999-30948	19990317
EP 1159354	A1	20011205	EP 1999-912606	19990317
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9917226	A	20020226	BR 1999-17226	19990317
PRIORITY APPLN. INFO.: US 1999-123005P P 19990305				
WO 1999-US5795 W 19990317				

AB The present invention relates to certain compns. comprising specific photo-oxidizing agents, which are a mixture of elected photo-oxidizing component and selected polymers, which has an improved photo-oxidizing performance, in particular due to improved solubility and surface activity and improved light absorption. The agent may comprise a polymeric component, preferably with $\geq 50\%$ monomer units containing a dipolar aprotic group., and a photo-oxidizing component in a (1-1000):1 weight ratio. Alternatively the agent is a mixture of a water-soluble polymer and a photo-oxidizing component that is a mixture of non-charged hydrophobic photo-oxidizing compds. and nonbonded ligand selected from compds. that can bind axially to a Si, Al, Ga, Ge or Sn phthalocyanine moiety; the photo-oxidizing compds. are selected from these phthalocyanines with a bonded ligand in at least one axial position and are solid at ambient temperature in the absence of impurities. The invention also provides a number of uses for these agents, including bleaching of hair and also paper, pulp and yarn; water purification; disinfecting uses; photo-dynamic therapy; spectral filters to improve photosynthesis; and disposable absorbents such as bandages and diapers.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 25 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:602592 CAPLUS

DOCUMENT NUMBER: 134:56259
 TITLE: Polymer-supported molybdenyl thioglycolate as oxygen atom transfer reagent
 AUTHOR(S): Arroyo, P.; Gil, S.; Munoz, A.; Palanca, P.; Sanchis, J.; Sanz, V.
 CORPORATE SOURCE: Departament de Quimica Organica, Universitat de Valencia, Burjassot, 46100, Spain
 SOURCE: Journal of Molecular Catalysis A: Chemical (2000), 160(2), 403-408
 CODEN: JMCCF2; ISSN: 1381-1169
 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 134:56259

AB Oxo-transfer reactions of a variety of substrates in DMF or methanol using polymer-supported molybdenyl thioglycolate (PSMT) have been investigated. The clean oxidation of Me₂PhP, n-butanethiol or benzoin to yield Me₂PhPO, disulfide or benzil, resp., occurs in high yield. In the presence of air or pyridine N-oxide, a catalytic cycle is accomplished which goes on until the complete depletion of the substrate.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 26 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:314419 CAPLUS
 DOCUMENT NUMBER: 132:341958
 TITLE: Polymer particles and polishing material containing them
 INVENTOR(S): Masayuki, Hattori; Masayuki, Motonari; Akira, Iio
 PATENT ASSIGNEE(S): Jsr Corporation, Japan
 SOURCE: Eur. Pat. Appl., 14 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 999254	A1	20000510	EP 1999-121854	19991104
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2000143807	A2	20000526	JP 1998-314739	19981105
TW 461916	B	20011101	TW 1999-88119244	19991104
US 2001039322	A1	20011108	US 2001-897129	20010703
US 6565767	B2	20030520		

PRIORITY APPLN. INFO.: JP 1998-314739 A 19981105
 US 1999-433213 A3 19991104

AB The polymer particles are obtained by polycondensation of ≥ 1 compound of the formula M(OR₁)_z, its hydrolyzates and its partial condensates, and ≥ 1 compound of the formula (R₂)_nM(OR₃)_{z-n}, its hydrolyzates and its partial condensates, and having a mean particle size of 3-1000 nm. In the formulas, M = Al, Si, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ge, Zr, Nb, Mo, Sn, Sb, Ta, W, Pb, or Ce; z is the atomic valence of M; R₁, R₃ = C1-5 alkyl, C1-6 acyl, or C1-9 aryl; R₂ = C1-8 monovalent organic group; n = 1 to (z - 2); and R₁, R₂, and R₃ may be the same or different. The polishing material is used for chemical-mech. polishing of semiconductor wafers and magnetic disks.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 27 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:518847 CAPLUS
 DOCUMENT NUMBER: 131:147874
 TITLE: Corrosion inhibitors and corrosion inhibition
 INVENTOR(S): Komatsu, Takashi
 PATENT ASSIGNEE(S): Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11222684	A2	19990817	JP 1998-22020	19980203

PRIORITY APPLN. INFO.: JP 1998-22020 19980203

AB The corrosion inhibitors are solns. or dispersions containing resins and either or both of oxidizing agents and chelating agents. Pigments may also be added. Corrosion of metals are prevented by application of the corrosion inhibitors. Further corrosion of metal materials, e.g. automobile disk brakes, are prevented by application of the agents on the corroded surfaces.

L1 ANSWER 28 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:403969 CAPLUS
DOCUMENT NUMBER: 131:144352
TITLE: Hypervalent iodine in synthesis. XXVIII. Preparation and utility of polymer-supported phenyliodine(III) diacetate
AUTHOR(S): Wang, Guo-Ping; Chen, Zhen-Chu
CORPORATE SOURCE: Chemistry department, Hangzhou University, Hangzhou, 310028, Peop. Rep. China
SOURCE: Synthetic Communications (1999), 29(16), 2859-2866
CODEN: SYNCAV; ISSN: 0039-7911
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Polymer-supported phenyliodine(III) diacetate has been developed and used effectively to oxidize a variety of organic compds. with good yield.
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 29 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:363147 CAPLUS
DOCUMENT NUMBER: 131:145342
TITLE: Polystyrene-based pyrazolinium permanganates: a new class of recyclable oxidizing reagents
AUTHOR(S): Abraham, Shiney; Rajan, P. K.; Sreekumar, K.
CORPORATE SOURCE: Department of Chemistry, University of Kerala, Thiruvananthapuram, 695 581, India
SOURCE: Designed Monomers and Polymers (1999), 2(2), 143-151
CODEN: DMPOF3; ISSN: 1385-772X
PUBLISHER: VSP BV
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Polystyrene-supported pyrazolinium permanganate has been prepared and used as a new class of recyclable oxidizing reagent for alcs. The reagent was found to be selective as it oxidized primary alcs. to aldehydes and secondary alcs. to ketones only. The effect of various reaction conditions such as the temperature, solvent, and molar concentration of the reagent was examined in order to find the optimum conditions. The spent pyrazolinium permanganate resin can be easily removed by filtration and can be recycled and reused.
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 30 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:268547 CAPLUS
DOCUMENT NUMBER: 131:44419
TITLE: Study on polymer-supported bromate ion oxidizer
AUTHOR(S): Yang, Gui-Chun; Cheng, Zu-Xin; Huang, Jin-Xia; Chen, Jia-Wei; Shi, Cong-Yun
CORPORATE SOURCE: Institute of Chemistry and Material, Hubei University, Wuhan, 430062, Peop. Rep. China
SOURCE: Youji Huaxue (1999), 19(2), 141-146
CODEN: YCHHDX; ISSN: 0253-2786
PUBLISHER: Kexue Chubanshe
DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB Polymer-supported bromate ion oxidizer was prepared from strong basic ion-exchange resin with sodium bromate. In the presence of 40% HBr or AlCl₃ or NaHSO₃, the primary alcs. and simple ethers were readily oxidized to esters; secondary alcs. to ketones; α,ω -diols and cyclic ethers to lactones; thiols and selenols to the corresponding disulfides and diselenides with good to excellent yields resp., by the polymer-supported bromate ion oxidizer.

L1 ANSWER 31 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:242765 CAPLUS

DOCUMENT NUMBER: 130:238247

TITLE: **Oxidizing agent-containing polymer compositions for gas-barrier packaging**
Oriani, Luis Alberto de Godoy
PATENT ASSIGNEE(S): Rhodia-Ster S/A, Brazil
SOURCE: Braz. Pedido PI, 12 pp.
CODEN: BPXXDX

DOCUMENT TYPE: Patent

LANGUAGE: Portuguese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BR 9604229	A	19980526	BR 1996-4229	19960909
PRIORITY APPLN. INFO.:			BR 1996-4229	19960909

AB The title compns. comprise (a) polyesters [e.g., PET, poly(ethylene naphthalate)], (b) polyamides (e.g., nylon 66, nylon 6, nylon MXD6), and (c) 0.01-20% oxidants (e.g., Co acetate, Al).

L1 ANSWER 32 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:155050 CAPLUS

DOCUMENT NUMBER: 128:199658

TITLE: **Manufacture of solid electrolytic capacitor containing polymer electrolyte**

INVENTOR(S): Yamaguchi, Rikizo

PATENT ASSIGNEE(S): Sanyo Electric Co., Ltd., Japan; Saga Sanyo Industries Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10064761	A2	19980306	JP 1996-221177	19960822
JP 3296727	B2	20020702		
PRIORITY APPLN. INFO.:			JP 1996-221177	19960822

AB The capacitor has a capacitor device, comprising a chemical conversion film-coated anode material, immersed with an elec. conductive polymer. The manufacture method involves (1) immersing the device with a solution containing a monomer for oxidation polymerization and an oxidizing agent and (2) keeping the device at 30-50° and humidity $\geq 60\%$ to form an elec. conductive polymer layer on the film. The capacitor shows low equivalent series resistance, small size, and large capacitance.

L1 ANSWER 33 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:76437 CAPLUS

DOCUMENT NUMBER: 128:199653

TITLE: **Solid electrolytic capacitor containing sulfonic acid-doped conductive polymer and its manufacture**
Kobayashi, Atsushi; Fukaumi, Takashi; Date, Tomohide

INVENTOR(S): Kobayashi, Atsushi; Fukaumi, Takashi; Date, Tomohide

PATENT ASSIGNEE(S): NEC Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10032145	A2	19980203	JP 1996-185831	19960716
JP 3235475	B2	20011204		
EP 820076	A2	19980121	EP 1997-112098	19970715
EP 820076	A3	20000112		
EP 820076	B1	20040211		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CN 1173029	A	19980211	CN 1997-115014	19970716
CN 1111884	B	20030618		
US 6229689	B1	20010508	US 1997-895594	19970716
PRIORITY APPLN. INFO.:			JP 1996-185831	A 19960716

AB The capacitor contains a polymer solid electrolyte layer doped with an organic sulfonic acid containing aromatic polysulfonic acid, OH- or CO₂H-containing organic sulfonic acid, alicyclic sulfonic acid, and benzoquinonesulfonic acid. The capacitor is manufactured by forming the polymer layer by chemical oxidation-polymerization of a polymerizable monomer by using an oxidizing agent containing a cupric compound, a Ag compound, their mixture, and a mixture of a Fe compound and H₂O₂. The manufacture method using the agent prevents byproducts from forming and gives the capacitor in a low cost. The capacitor shows improved ESR (equivalent series resistance) and current leakage at higher temperature and high reliability.

L1 ANSWER 34 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:797868 CAPLUS

DOCUMENT NUMBER: 128:88821

TITLE: Synthesis of isoxazolidines using polymer supported perruthenate (PSP)

AUTHOR(S): Hinzen, Berthold; Ley, Steven V.

CORPORATE SOURCE: Department of Chemistry, University of Cambridge, Cambridge, CB2 1EW, UK

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1998), (1), 1-2
CODEN: JCPRB4; ISSN: 0300-922X

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 128:88821

AB Polymer supported perruthenate has been used in mild and selective oxidns. of secondary hydroxylamines to give nitrones. In the presence of dipolarophiles isoxazolidines are obtained in a one-pot processes in good yields.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 35 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:481271 CAPLUS

DOCUMENT NUMBER: 127:175993

TITLE: Polymer supported perruthenate: a new oxidant for clean organic synthesis

AUTHOR(S): Hinzen, Berthold; Ley, Steven V.

CORPORATE SOURCE: Dep. Chem., Univ. Cambridge, Cambridge, CB2 1EW, UK

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1997), (13), 1907-1908
CODEN: JCPRB4; ISSN: 0300-922X

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 127:175993

AB A polymer supported perruthenate reagent has been prepared and used in the conversion of primary and secondary alcs. to aldehydes and ketones, resp., affording pure products without the need for conventional work-up procedures.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 36 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:641304 CAPLUS
DOCUMENT NUMBER: 125:284363
TITLE: Cosmetic melanins
INVENTOR(S): Pawelek, John M.; Platt, James T.
PATENT ASSIGNEE(S): Yale University, USA
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9625920	A1	19960829	WO 1996-US2163	19960214
W: AU, BR, JP, KR, RU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5744125	A	19980428	US 1995-392589	19950223
AU 9649265	A1	19960911	AU 1996-49265	19960214
AU 702553	B2	19990225		
EP 820275	A1	19980128	EP 1996-905532	19960214
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
BR 9607287	A	19980623	BR 1996-7287	19960214
JP 11501341	T2	19990202	JP 1996-525766	19960214
PRIORITY APPLN. INFO.:				
			US 1995-392589	A 19950223
			US 1993-109286	B2 19930819
			WO 1996-US2163	W 19960214

AB Disclosed are cosmetic melanins of different colors produced by procedures involving oxidative polymerization of monomeric precursors of melanin and/or comonomers that enhance substantivity or adherence of the melanins to the skin and hair. Also disclosed are methods for preparing cosmetic melanins and methods for using these compns. topically to produce a natural-appearing tan and to prevent damage to skin caused by UV exposure. Aloin 100 kg, concentrated NH4OH 350 L, CuSO4 750 g, water 550 L, and H2O2 100 L were mixed and aerated; the resultant melanin polymer was precipitated by EtOH (2500 L) and dried to yield a red cosmetic melanin. Melanin obtained was dissolved in Avon body lotion at concentration of 1% for cosmetic uses.

L1 ANSWER 37 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:425451 CAPLUS
DOCUMENT NUMBER: 125:66079
TITLE: Polymer-coated piezoelectric crystal sensor for air analysis
INVENTOR(S): Schoenfeld, Axel; Feucht, Gernot; Schleicher, Andreas; Frank, Georg; Rieger, Heinz-Joachim
PATENT ASSIGNEE(S): Hoechst A.-G., Germany
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9614573	A1	19960517	WO 1995-EP4315	19951103
W: CN, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 4439765	A1	19960515	DE 1994-4439765	19941107
DE 4440020	A1	19960515	DE 1994-4440020	19941109
DE 19509296	A1	19960919	DE 1995-19509296	19950315
EP 805971	A1	19971112	EP 1995-937861	19951103
EP 805971	B1	19980923		
R: DE, FR, GB				
JP 10508693	T2	19980825	JP 1995-515046	19951103
US 5958787	A	19990928	US 1997-836166	19970623
PRIORITY APPLN. INFO.:				
			DE 1994-4439765	A 19941107
			DE 1994-4440020	A 19941109

DE 1995-19509296 A 19950315
WO 1995-EP4315 W 19951103

AB A sensor for oxidizing agents contains an oxidizable aromatic polymer. The sensor consists of a piezoelec. crystal coated with a porous or non-porous layer that contains the oxidizable aromatic polymer.

L1 ANSWER 38 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:392127 CAPLUS

DOCUMENT NUMBER: 125:116179

TITLE: Polymers having hydroxyl and carboxyl groups and their preparation

INVENTOR(S): Tahara, Hideyuki; Itoh, Hiroshi; Kofuji, Keiji; Takagi, Masahito

PATENT ASSIGNEE(S): Nippon Shokubai Co., Ltd., Japan

SOURCE: U.S., 14 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5523380	A	19960604	US 1994-273149	19940713
PRIORITY APPLN. INFO.:			US 1994-273149	19940713

AB The title polymers, comprising α -glycol structure units [CH₂CH(OH)CR₁(OH)CH₂], carboxylic acid-based structure units [CHR₂CR₃(CO₂M)] (R₁ = H, Me, Cl; R₂ = H, Me, CO₂M; R₃ = H, Me; M = H, 1-3 valent metal, NH₄, amine), and lactone structure units, provide superior dispersibility, chelating ability, and viscosity-stabilizing effect and are useful as detergent builders, pigment- and cement-dispersing agents, hydrogen peroxide stabilizers, and gas-barrier agents for plastic films. The polymer are produced by copolyimg. conjugated diene monomers (e.g., butadiene) and carboxylic acid monomers (e.g., maleic anhydride) and oxidizing copolymers (e.g., with KMnO₄, H₂O₂).

L1 ANSWER 39 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:340287 CAPLUS

DOCUMENT NUMBER: 125:11750

TITLE: Manufacture of phenol polymers

INVENTOR(S): Terahara, Atsushi; Higashimura, Hideyuki

PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

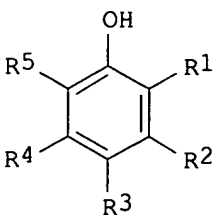
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08053545	A2	19960227	JP 1994-190657	19940812
JP 3596038	B2	20041202		
JP 2004124109	A2	20040422	JP 2004-25331	20040202
PRIORITY APPLN. INFO.:			JP 1994-190657	A3 19940812

OTHER SOURCE(S): MARPAT 125:11750

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AB In the manufacture, phenols I [R1-5 = H, halo, (substituted) hydrocarbon, hydrocarbon oxy groups, (substituted) amino, OH; ≥ 2 of R1, R3, R5 = H] are oxidized with peroxides in the presence of transition metal complexes as catalysts to give title polymers with good lower cost processability, useful for adhesives, coatings, etc. Thus, 745 mg phenol, 4 mg μ -oxobis[N,N'-di(salicylidene) ethylenediaminato]iron(III), and 1 mL hydrogen peroxide were mixed for 3 h to give a polymer with number-average mol. weight 3300 and weight-average mol. weight 14,300.

L1 ANSWER 40 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:813872 CAPLUS
DOCUMENT NUMBER: 123:348417
TITLE: Stable polymer oxidant for decontamination
AUTHOR(S): Tillman, N.; Kaplan, M. S.
CORPORATE SOURCE: Eastman Kodak Co., Rochester, NY, USA
SOURCE: Report (1994), ERDEC-TR-109; Order No. AD-A282579, 107 pp. Avail.: NTIS
From: Gov. Rep. Announce. Index (U. S.) 1994, 94(22), Abstr. No. 462,109

DOCUMENT TYPE: Report
LANGUAGE: English

AB Treatment of a variety of polymers with ozone in oxygen was investigated as a means of forming covalently-bound peroxide groups attached to solid polymeric materials. Cellulose esters, such as cellulose acetate propionate, were found to form significant amts. of peroxide groups (greater than or equal to 1 mmol/g). These ozonized cellulose esters (XAE) were extensively tested for reactivity and sorptivity against a range of CW agent simulants, especially organosulfide mustard simulants. The oxidative reactivities of XAEs were found to exceed that of model alkyl hydroperoxides and to be comparable to alkyl hydroperoxides catalyzed by transition metal compds. They were somewhat less reactive than peracids, but also more thermally stable. Initial efforts to formulate XAEs with transition metal complexes in order to speed reaction of mustard simulants and attack refractory organophosphorus simulants were unsuccessful. It was found that the reactive peroxide groups formed by ozonolysis improved the ability of XAE resins to reduce vapor outgassing of mustard simulants, especially at elevated temperature, compared to untreated resins.

L1 ANSWER 41 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:704931 CAPLUS
DOCUMENT NUMBER: 123:85261
TITLE: Polymer supported bromates as new, versatile and efficient oxidizing reagents for various organic compounds
AUTHOR(S): Tamami, B.; Zarchi, M. A. Karimi
CORPORATE SOURCE: Dep. Chem., Shiraz University, Shiraz, Iran
SOURCE: European Polymer Journal (1995), 31(8), 715-17
CODEN: EUPJAG; ISSN: 0014-3057

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Crosslinked poly(4-vinyl-pyridinium)bromate [P4Br(v)] and Amberlite IRA-400 supported bromate [Ps-Br(v)] were prepared and used as oxidizing reagents. Polymer [P4-Br(v)] is more reactive and [Ps-Br(v)] is more selective; both can be regenerated. The Ps-Br(v) is active only in the presence of a catalytic amount of a Lewis acid.

L1 ANSWER 42 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:667371 CAPLUS
DOCUMENT NUMBER: 123:65054
TITLE: Method for polymer formation from wastes
PATENT ASSIGNEE(S): Natdevco N.V., Neth. Antilles
SOURCE: Belg., 26 pp.
CODEN: BEXXAL

DOCUMENT TYPE: Patent
LANGUAGE: Dutch

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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BE 1006920	A3	19950124	BE 1993-247	19930306
PRIORITY APPLN. INFO.:			BE 1993-247	19930306

AB In this process, in which the liquid and solid waste are separated from each other and reaction components added for forming, and becoming part of, a polymer matrix, the liquid waste is further separated into a 1st group having pH ≤ 7 and a 2nd group having pH > 7 , after which the waste is treated in a 3-stage process. The 1st stage comprises forming a 1st mixture by checking whether the liquid of the 1st group has pH ≤ 5 and acidifying the liquid to pH ≤ 5 when the pH is > 5 , adding an oxidant to the liquid, checking whether the liquid of the 1st group contains a predetd. 1st amount of metal-containing precipitate-forming reagents, and adding salts of metal-containing precipitate-forming reagents when those reagents are not present. The 2nd stage comprises forming a 2nd mixture of the solid waste and the liquid from the 2nd group, checking whether this mixture has pH ≥ 8 , and adding base to obtain pH ≥ 8 when pH < 8 . The 3rd stage comprises forming a 3rd mixture by combining the 1st and 2nd mixture, checking whether this mixture has pH > 7 , and adding base to obtain pH > 7 when pH < 7 , and adding the above-mentioned reaction components to the mixture. This method permits treatment of different types of waste.

L1 ANSWER 43 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1995:450225 CAPLUS
 DOCUMENT NUMBER: 123:146451
 TITLE: Present status and developmental prospects of antifelt finishing of wool fabrics
 AUTHOR(S): Jovancic, Petar; Jocic, Dragan; Trajkovic, Rista
 CORPORATE SOURCE: TMF, Belgrade, Yugoslavia
 SOURCE: Hemijska Vlakna (1994), 34(1-4), 35-46
 CODEN: HEVLA7; ISSN: 0367-5793
 PUBLISHER: Viskoza-Sektor Razvoja
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: Serbo-Croatian

AB This paper reviews with 68 refs. the presents state and development of processes for the antifelt finishing of wool in various forms. It describes the application of **oxidizing agents** and **polymers**, as well as chlorination polymer processes with particular emphasis on the processes for the production of SUPERWASH wool which have reached com. use. The text is concentrated on major developments, although some special processes and relevant machine developments are discussed. The future trends and new developments are reviewed, particularly process based on treating the wool with enzymes as an alternative to today's conventional methods.

L1 ANSWER 44 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1995:419752 CAPLUS
 DOCUMENT NUMBER: 122:188194
 TITLE: Direct synthesis of conducting polymers from simple monomers
 AUTHOR(S): Toshima, Naoki; Hara, Susumu
 CORPORATE SOURCE: Department of Applied Chemistry, University of Tokyo, Tokyo, 113, Japan
 SOURCE: Progress in Polymer Science (1995), 20(1), 155-83
 CODEN: PRPSB8; ISSN: 0079-6700
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: English

AB A review with 252 refs. on the polymerization of simple monomers using oxidizing agents and/or catalysts to enable mass production of conductive polymers. Preparation of polyphenylene, polypyrrole, polythiophene, and polyaniline is reviewed and discussed with respect to preparation methods, catalytic activities, and properties of the obtained polymers.

L1 ANSWER 45 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1994:552170 CAPLUS
 DOCUMENT NUMBER: 121:152170
 TITLE: Preparation of extracellular tyrosinase and synthesis of polyphenolic polymers with the enzyme
 INVENTOR(S): Della-Cioppa, Guy Richard; Garger, Stephen John, Jr.; McCulloch, Michael Jay; McCulloch, Michael Jay;

Sverlow, Genadie Gleb
 PATENT ASSIGNEE(S): Biosource Genetics Corp., USA
 SOURCE: PCT Int. Appl., 42 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9412644	A2	19940609	WO 1993-US11359	19931122
WO 9412644	A3	19950504		
W: AU, CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5340734	A	19940823	US 1992-982095	19921125
ZA 9308581	A	19950221	ZA 1993-8581	19931117
US 5466592	A	19951114	US 1993-154171	19931117
US 5792649	A	19980811	US 1993-154283	19931117
CA 2149764	AA	19940609	CA 1993-2149764	19931122
CA 2149764	C	20000808		
AU 9458965	A1	19940622	AU 1994-58965	19931122
AU 689093	B2	19980326		
EP 672148	A1	19950920	EP 1994-905317	19931122
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
IL 107724	A1	20010614	IL 1993-107724	19931123
IL 123778	A1	20021201	IL 1993-123778	19931123
IL 123780	A1	20030312	IL 1993-123780	19931123
US 5486351	A	19960123	US 1993-166465	19931214
US 5801047	A	19980901	US 1995-471993	19950606
PRIORITY APPLN. INFO.:				
			US 1992-982095	A 19921125
			US 1993-154283	A1 19931117
			WO 1993-US11359	W 19931122
			IL 1993-107724	A3 19931123

AB A stable, highly active extracellular tyrosinase is produced from genetically transformed microorganism such as Streptomyces antibioticus. The enzyme is used for the production of chemical modified polyphenolic polymer (PPP) by reacting a substrate such as l-tyrosine, hydrolyzed protein, or an oligopeptide in combination with l-tyrosine. Production of tyrosinase with Streptomyces antibioticus transformed with pBS1082S and production of PPP in vitro in organic solvents or in vivo in aqueous solution were shown.

L1 ANSWER 46 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:460799 CAPLUS

DOCUMENT NUMBER: 121:60799

TITLE: Pyrotechnic sheet materials, their manufacture, and inflators for vehicle occupant restraint systems comprising the sheet materials

INVENTOR(S): Graham, Steven John; Leiper, Graeme Allen; Bishop, Charles Arthur

PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK

SOURCE: Brit. UK Pat. Appl., 15 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2269380	A1	19940209	GB 1993-14607	19930714
GB 2269380	B2	19951122		
EP 584921	A2	19940302	EP 1993-305520	19930714
EP 584921	A3	19941019		
EP 584921	B1	19961009		
R: BE, DE, ES, FR, GB, IT, SE				
ES 2092230	T3	19961116	ES 1993-305520	19930714
ZA 9305322	A	19940311	ZA 1993-5322	19930722
CA 2101621	AA	19940205	CA 1993-2101621	19930729
JP 06172076	A2	19940621	JP 1993-187989	19930729

AU 9344459 A1 19940210 AU 1993-44459 19930804
AU 662435 B2 19950831

PRIORITY APPLN. INFO.: GB 1992-16517 A 19920804

AB The sheet materials comprise a substrate of an oxidizing polymeric film, e.g., halogenopolymer film, coated on ≥ 1 sides with a layer of oxidizable material, e.g., Mg. Upon ignition, the substrate is capable of exothermically reacting with the oxidizable material. The oxidizable material is covered with an overlying protective barrier layer of passivating material comprising a passive metal or an oxide of a passive metal. The barrier layer is effective to extend the storage life of the pyrotechnic sheet material by providing a dense non-porous oxide layer that prevents oxidation of the oxidizable material until ignition of the pyrotechnic sheet material occurs.

L1 ANSWER 47 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:438739 CAPLUS

DOCUMENT NUMBER: 121:38739

TITLE: Pyrotechnic sheet materials, their manufacture, and inflators for vehicle occupant restraint systems comprising the sheet materials

INVENTOR(S): Kwan, Chan Sek; Graham, Steven John; Leiper, Graeme Allen

PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK; ICI Canada Inc.

SOURCE: Brit. UK Pat. Appl., 14 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2269379	A1	19940209	GB 1993-14576	19930714
EP 584922	A2	19940302	EP 1993-305521	19930714
EP 584922	A3	19941109		
EP 584922	B1	19961106		
R: BE, DE, ES, FR, GB, IT, SE				
ES 2095012	T3	19970201	ES 1993-305521	19930714
ZA 9305321	A	19940518	ZA 1993-5321	19930722
CA 2101624	AA	19940207	CA 1993-2101624	19930729
JP 06172077	A2	19940621	JP 1993-192187	19930803
AU 9344490	A1	19940210	AU 1993-44490	19930805
AU 661786	B2	19950803		
US 5518807	A	19960521	US 1993-102779	19930806

PRIORITY APPLN. INFO.: GB 1992-16720 A 19920806

AB The materials comprise a substrate of porous, vapor-permeable oxidizing polymeric film, e.g., halopolymeric film, especially PTFE, coated on ≥ 1 sides with a layer of oxidizable material, e.g., Mg. The substrate and the oxidizable material are conjointly capable of reacting together upon ignition. Advantageously, at least part of the oxidizing material is accommodated within the pores of the polymer. The pyrotechnic sheet materials burn faster than materials comprising a solid polymeric film, due to the increased surface area caused by the pores of contact of the substrate and the oxidizable material. Prior to coating the substrate with the oxidizable material, the pores may be partially filled with an incendiary material, e.g., NaN_3 .

L1 ANSWER 48 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:38171 CAPLUS

DOCUMENT NUMBER: 118:38171

TITLE: Poly(vinylpyridine N-oxide) supported dichromates as new effective, mild and versatile oxidizing reagents for various organic compounds

AUTHOR(S): Tamami, B.; Goudarzian, N.

CORPORATE SOURCE: Dep. Chemistry, Shiraz Univ., Shiraz, Iran

SOURCE: European Polymer Journal (1992), 28(9), 1035-8

CODEN: EUPJAG; ISSN: 0014-3057

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 118:38171

AB Poly(vinylpyridine N-oxide) supported dichromates are readily prepared and used as new efficient oxidizing reagents for alcs., oximes, amines, and thiols. In contrast to the monomeric analog, pyridine N-oxide dichromate, these reagents are quite stable, have easier reaction work-up, and can be regenerated. Poly(2-vinylpyridine N-oxide) supported dichromate is more efficient than its poly(4-isomer).

L1 ANSWER 49 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:427799 CAPLUS

DOCUMENT NUMBER: 117:27799

TITLE: Preparation of a macroporous polymer-bound N-oxide and its use as an oxidizing agent in oxidizing primary halides to aldehydes

AUTHOR(S): Chen, Jiawei; Wu, Yumin

CORPORATE SOURCE: Dep. Chem., Hubei Univ., Wuhan, 430062, Peop. Rep. China

SOURCE: Lizi Jiaohuan Yu Xifu (1991), 7(4), 254-60

CODEN: LJYXE5; ISSN: 1001-5493

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB Macroporous polymer-bound tert-amine oxide, prepared from anionic exchanger D301, oxidizes primary primary alkyl iodides, bromides, allylic and benzoic halides to aldehydes with excellent yields as well as bibromides selectively to monoaldehyde. Only halogen bound end is oxidized when halogen atom and other groups coexist. The oxidizing resin can be regenerated 3 times without notable changes in its activity.

L1 ANSWER 50 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:409358 CAPLUS

DOCUMENT NUMBER: 117:9358

TITLE: Oxidizing agents immobilized on polymers

AUTHOR(S): Taylor, R. G.

CORPORATE SOURCE: USSR

SOURCE: Polimer. Reagenty i Katalizatory, M. (1991) 107-25

From: Ref. Zh., Khim. 1991, Abstr. No. 20S510

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Title only translated.

L1 ANSWER 51 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:236308 CAPLUS

DOCUMENT NUMBER: 116:236308

TITLE: Preparation of poly(methyl methacrylate)-based resins with bound chromium(VI) reagents and their use as oxidizing agents

AUTHOR(S): Hassanein, M.; Aly, El Saied A.; Abbas, Y. A.;

El-Sigeny, Samia M.

CORPORATE SOURCE: Fac. Sci., Tanta Univ., Tanta, Egypt

SOURCE: European Polymer Journal (1992), 28(4), 411-13

CODEN: EUPJAG; ISSN: 0014-3057

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Insol. polymeric dichromate and chlorochromate reagents were prepared by modification of Me methacrylate-divinylbenzene copolymer beads with ethylenediamine followed by treatment of the resulting resin with excess MeI and subsequent reaction with aqueous CrO₃ or CrO₃ and benzyltriethylammonium chloride. These polymeric reagents selectively oxidized alcs. to the corresponding carbonyl compds. In addition to easy work-up of the reaction mixture, the resulting polymeric byproduct could be simply regenerated and re-used.

L1 ANSWER 52 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:197456 CAPLUS

DOCUMENT NUMBER: 116:197456

TITLE: Redox gel process for more uniform fluid flow in formations

INVENTOR(S): Cayias, John L.; Holley, Susan M.; Lichtenberger, Gunter J.

PATENT ASSIGNEE(S): Oryz Energy Co., USA

SOURCE: U.S., 8 pp.

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5035287	A	19910730	US 1990-559612	19900730
PRIORITY APPLN. INFO.:			US 1990-559612	19900730

AB A metal-containing oxidizing solution, e.g., air, oxygen, or H₂O₂ containing metals at a valence state >3+, such as Mo, Mn, Nb, Ir, Ce, or Bi, is injected through wellbores and reacts in a subterranean reservoir which has a naturally-occurring reduction capacity to form a slightly soluble compound of metal having a valance of +3. The metal is used to crosslink a water soluble polymer, e.g, polyacrylamide, which is injected into the metal containing pore volume, thus decreasing flow in the treated portion of the reservoir.

L1 ANSWER 53 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:247938 CAPLUS
DOCUMENT NUMBER: 114:247938
TITLE: Polymer-supported analogs of halogeno-sulfonamides preparation and applications in synthetic organic chemistry
AUTHOR(S): Salunkhe, M. M.; Mane, R. B.; Kanade, A. S.
CORPORATE SOURCE: Dep. Chem., Shivaji Univ., Kolhapur, 416004, India
SOURCE: European Polymer Journal (1991), 27(6), 461-3
CODEN: EUPJAG; ISSN: 0014-3057
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Crosslinked polymer-supported analogs of halogeno-sulfonamides were prepared and developed as a new class of recyclable solid-phase oxidizing and halogenating reagents. Introduction of sulfonamide group in polystyrene resin was conveniently done by chlorosulfonation followed by amidation. Halogeno-sulfonamides were obtained by treatment of sodium hypohalite with sulfonamide resin. These reagents oxidized primary and secondary alcs. and also halogenated various compds. The spent polymeric reagent can be regenerated in a single step many times without loss of capacity.

L1 ANSWER 54 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:186348 CAPLUS
DOCUMENT NUMBER: 114:186348
TITLE: Inhibition of polymer scale adhesion to polymerization apparatus
INVENTOR(S): Kaneko, Ichiro; Ueno, Susumu; Watanabe, Mikio
PATENT ASSIGNEE(S): Shin-Etsu Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02292303	A2	19901203	JP 1989-113053	19890502
JP 06099489	B4	19941207		
PRIORITY APPLN. INFO.:			JP 1989-113053	19890502

AB Apparatus for the polymerization of ethylenically unsatd. monomers is treated with solns. containing aromatic amines and oxidizing agents in Broensted acids to prevent the adhesion of polymer scales to the inner wall of the apparatus Thus, a 20-L reactor was treated with a solution containing aniline 0.01, ammonium persulfate 0.024, and H₂SO₄ 0.02% for 8 h, washed, and used to prepare a polymer with amount of adhesion of scale 80 g/m², vs. 1150 g/m² without the treatment.

L1 ANSWER 55 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:23454 CAPLUS
DOCUMENT NUMBER: 114:23454
TITLE: High-molecular-weight reagents in organic synthesis.

VIII. Polymer-supported quaternary pyridinium salts
in organic synthesis

AUTHOR(S): Jakobsone, I.; Klavins, M.; Volkovs, U.; Briede, N.; Zicmanis, A.
CORPORATE SOURCE: Latv. State Univ., Riga, USSR
SOURCE: Latvijas PSR Zinatnu Akademijas Vestis, Kimijas Serija (1990), (4), 478-82
CODEN: LZAKAM; ISSN: 0002-3248
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB Copolymers of 2-methyl-5-vinylpyridine with divinylbenzene were quaternized by MeI and then converted by anion exchange to the polymeric pyridinium bromates, chromate, iodate, periodate, nitrate, phenoxide, cyanate, and thiocyanate. These polymeric reagents were used to oxidize alcs. and aldehydes and to substitute Cl in PhCH₂Cl with NO₂, OPh, SCN, etc.

L1 ANSWER 56 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:7656 CAPLUS
DOCUMENT NUMBER: 114:7656
TITLE: Study on selective oxidation of α,β -unsaturated alcohols - synthesis of two new types of polymer-supported oxidizing reagents and their excellent selectivity
AUTHOR(S): Yang, Huirong; Li, Bina; Lu, Qiansheng
CORPORATE SOURCE: Dep. Chem. Eng., Guangdong Inst. Technol., Guangzhou, Peop. Rep. China
SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1990), 11(7), 759-61
CODEN: KTHPDM; ISSN: 0251-0790

DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB Tertiary amine- and quaternary ammonium-type divinylbenzene-styrene copolymers were prepared and used as supports for CrO₃ oxidizing agents for unsatd. alcs. The supported oxidizing agents successfully oxidized α,β -unsatd. alcs. into the corresponding α,β -unsatd. aldehydes, but could not oxidize the saturated alcs. under similar conditions.

L1 ANSWER 57 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:621415 CAPLUS
DOCUMENT NUMBER: 113:221415
TITLE: Fixed photothermographic materials and their preparation
INVENTOR(S): Ogawa, Shuichiro; Hayashi, Yoshio
PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02143243	A2	19900601	JP 1988-296027	19881125
PRIORITY APPLN. INFO.:			JP 1988-296027	19881125

AB In the title material made from a photothermog. material in which the surface layer of a heat-developable dry Ag salt composition based on an organic Ag salt **oxidizing agent**, a **polymer**, a reducing agent, and Ag halides or Ag halide-forming components contains a small amount of Ag metal seeds or seeds of a metal which is nobler than Ag, the fixed photothermog. material is prepared by allowing the Ag of the exposed area to sep. in the inner part of the heat-developable dry Ag salt composition and the Ag of the unexposed area and the Ag of the exposed area which does'nt contribute to images to sep. simultaneously in the surface layer of the Ag salt composition and phys. removing the Ag separated on the surface. The title manufacturing is effected by heat-developing an exposed photothermog. material and removing phys. the Ag separated on the surface layer.

L1 ANSWER 58 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:516739 CAPLUS

DOCUMENT NUMBER: 113:116739
 TITLE: Forming smooth surfaces on articles from polymers of ethylene, propylene, butadiene, or styrene
 INVENTOR(S): Eschwey, Manfred; Van Bonn, Rolf; Neumann, Horst
 PATENT ASSIGNEE(S): Messer Griesheim G.m.b.H., Germany
 SOURCE: Ger. Offen., 5 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3840269	A1	19900531	DE 1988-3840269	19881130
DE 3840269	C2	19901129		
EP 372207	A2	19900613	EP 1989-119674	19891024
EP 372207	A3	19910130		
EP 372207	B1	19950215		
R: DE, ES, FR, GB, IT, SE				
ES 2070158	T3	19950601	ES 1989-119674	19891024
JP 02269134	A2	19901102	JP 1989-307817	19891129
JP 3004294	B2	20000131		

PRIORITY APPLN. INFO.: DE 1988-3840269 A 19881130

AB In the title process, which minimized the active surface for very slight interactions with media, the polymer surfaces are treated with gases containing F and oxidizing agents. A 500-mL HDPE bottle (with a matte surface having roughness 1.7-3.5 μm) was treated in an autoclave at a surface temperature of $\sim 135^\circ$ with N containing 0.2% F and 1.3% O to give a glossy surface with roughness 0.58 μm .

L1 ANSWER 59 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:157314 CAPLUS
 DOCUMENT NUMBER: 112:157314
 TITLE: Polymer-supported persulfonic acid as oxidizing agent
 AUTHOR(S): Pande, C. S.; Jain, N.
 CORPORATE SOURCE: Dep. Chem., H. P. Univ., Shimla, 171 005, India
 SOURCE: Synthetic Communications (1989), 19(7-8), 1271-9
 CODEN: SYNCAV; ISSN: 0039-7911

DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 112:157314

AB A polymer-supported persulfonic acid has been prepared and applied to the oxidation of carboxylic acids, ketones, olefins, and disulfide bonds of cystine and cytsinyl peptides to their peracids, esters (lactones), epoxides and sulfonic acid derivs., resp., in good yields. The resin also effectively removed the formyl protection from formyl amino acids. Spent polymer was reactivated by simple reactions.

L1 ANSWER 60 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1989:94115 CAPLUS
 DOCUMENT NUMBER: 110:94115
 TITLE: Polymer-supported cation radicals
 AUTHOR(S): Wright, Michael E.; Jin, Myung Jong
 CORPORATE SOURCE: Dep. Chem. Biochem., Utah State Univ., Logan, UT, 84322-0300, USA
 SOURCE: Journal of Organic Chemistry (1989), 54(4), 965-8
 CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 110:94115

AB Reaction of chloromethylated polystyrene beads with Ph_3N and Et_2AlCl gave a highly cross-linked polymer. The chloromethylated polystyrene was modified by reaction with 2,6-dibromocarbazole and K_2CO_3 in DMF at 100° to give an excellent yield of polymer-supported 2,6-dibromocarbazole without concomitant crosslinking. The polymer-bound 2,6-dibromocarbazole was nonreactive toward SbCl_5 , whereas 9-N-benzyl-2,6-dibromocarbazole readily generated the aminium cation radical upon reaction with SbCl_5 . Attachment of phenothiazine to a polystyrene support gave a reagent that reacted very rapidly with SbCl_5 in

CH2C12. The polymer-bound phenothiazine cation radical readily oxidized the metal-metal bond in [C5H5Fe(CO)2]2 (C5H5 = cyclopentadienyl) and underwent anion exchange with Bu4NPF6 to afford a more synthetically useful reagent.

L1 ANSWER 61 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1988:632446 CAPLUS

DOCUMENT NUMBER: 109:232446

TITLE: Preparation of electrically conductive polymeric materials

INVENTOR(S): Kato, Ryoichi; Hiraoka, Kazuyuki; Masuhara, Kenichi

PATENT ASSIGNEE(S): Nisshin Steel Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 63184211	A2	19880729	JP 1987-15675	19870126
PRIORITY APPLN. INFO.:			JP 1987-15675	19870126

AB Products having good elec. conductivity without impairing mech. strength and processability are prepared, without adding any elec. conductive fillers, from polymers containing oxidizing agents by exposure to a plasma of unpolymerizable gases and contact with electrochem. polymerizable monomers to form elec. conductive surface layers. PMMA containing 30% FeCl3 was extruded to give a sheet, which was exposed 10 min to an Ar plasma (1.0 torr Ar gas, 13.56 MHz, 50 W) and contacted for 10 min with pyrrole vapor to give a sheet having surface resistivity (3-5) x 10⁴ Ω, vs. 106-108 Ω for a sheet prepared without the plasma treatment.

L1 ANSWER 62 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1987:17589 CAPLUS

DOCUMENT NUMBER: 106:17589

TITLE: Polymer-supported diaryl selenoxide and telluroxide as mild and selective oxidizing agents

AUTHOR(S): Hu, Nan Xing; Aso, Yoshio; Otsubo, Tetsuo; Ogura, Fumio

CORPORATE SOURCE: Fac. Eng., Hiroshima Univ., Hiroshima, 724, Japan

SOURCE: Bulletin of the Chemical Society of Japan (1986), 59(3), 879-84

CODEN: BCSJA8; ISSN: 0009-2673

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 106:17589

AB Polystyrene-bound diaryl selenoxide and telluroxide were prepared and used as mild oxidizing agents for thiols to disulfides, phosphines to phosphine oxides, hydroquinone and catechol to p- and o-benzoquinones, and thio ketones to oxo compds. The telluroxide completed these reactions in shorter periods or under milder conditions than the selenoxide. In addition, they effected novel solvent-dependent reactions of thio amides involving thioureas to 1,2,4-thiadiazoles or to nitriles. In nonacidic solvents, dehydrosulfurization to nitriles occurred in preference to oxidative dimerization to 1,2,4-thiadiazoles, but an acidic solvent such as AcOH promoted the latter reaction.

L1 ANSWER 63 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1986:515227 CAPLUS

DOCUMENT NUMBER: 105:115227

TITLE: Polymer-supported chromium trioxide reagent for the synthesis of camphor

AUTHOR(S): Li, Mingqian; Ran, Ruicheng; Jia, Xinru

CORPORATE SOURCE: Dep. Chem., Beijing Univ., Beijing, Peop. Rep. China

SOURCE: Huaxue Tongbao (1985), (12), 15-16

CODEN: HHTPAU; ISSN: 0441-3776

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB Polymer-supported CrO3 was prepared and used in the oxidation of isoborneol to

camphor. The life, activation, and regeneration of the reagent were studied.

L1 ANSWER 64 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1986:110633 CAPLUS
DOCUMENT NUMBER: 104:110633
TITLE: Surface pretreatment of polymers with fluorine
AUTHOR(S): Milker, R.
CORPORATE SOURCE: Lohmann G.m.b.H. und Co. K.-G., Neuwied, D-5450, Fed. Rep. Ger.
SOURCE: Coating (1985), 18(11), 294, 296-8
CODEN: COTGAV; ISSN: 0590-8450
DOCUMENT TYPE: Journal; General Review
LANGUAGE: German

AB A review with 15 refs. of surface oxidation by F pretreatment of polymeric web-forming materials for improved adhesion. The process of surface fluorination including the apparatus, its advantages, and F pretreatment of a foam web are reviewed.

L1 ANSWER 65 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1985:454778 CAPLUS
DOCUMENT NUMBER: 103:54778
TITLE: Nonlinear dependence of the limiting current on concentration in charge injection into thin polymer films
AUTHOR(S): Khatiashvili, A. A.
CORPORATE SOURCE: Inst. Kibern., Tbilisi, USSR
SOURCE: Elektrokhiimiya (1985), 21(4), 567-9
CODEN: ELKKAX; ISSN: 0424-8570
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB Two extreme cases are distinguished in the dependence of the limiting elec. current (i_0) on the concentration of oxidizing agent (c), e.g. Ce^{4+} , during the injection of holes in insulators through electrochem. contacts: (1) i_0 is proportional to c (e.g., anthracene single crystals), and (2) i_0 is proportional to $c^{0.5}$. In thin polymer films, e.g. terylene and Ftoroplast [9039-02-5], the slope of $\log i_0$ vs. $\log c$ plot varies from 0.5 to 0.75.

L1 ANSWER 66 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1984:52530 CAPLUS
DOCUMENT NUMBER: 100:52530
TITLE: High-molecular weight thallium(III) sulfonates
PATENT ASSIGNEE(S): Asahi-Dow Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 58129005	A2	19830801	JP 1982-10206	19820127
PRIORITY APPLN. INFO.:			JP 1982-10206	19820127

AB Tl(III) salts of sulfonated polymers (prepared from low-mol. weight Tl salts) are oxidizing agents for unsatd. compds. Thus, 10 g Nafion was converted to 72% Tl salt by heating with 1.48 g Tl(NO₃)₃·3H₂O in 1N HNO₃. Tl salts of Amberlite 200 C, sulfonated ethylene-vinyl acetate copolymer, and sulfonated ethylene-methacrylic acid copolymer were similarly prepared using Tl nitrate, acetate, or trifluoroacetate. Substrates oxidized included α -methylstyrene [98-83-9], cyclohexene [110-83-8], and 2-heptene [592-77-8].

L1 ANSWER 67 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1982:545981 CAPLUS
DOCUMENT NUMBER: 97:145981
TITLE: A heat exchanger having a plastic membrane
INVENTOR(S): Smith, John; Boiston, David Anthony
PATENT ASSIGNEE(S): Courtaulds PLC, UK
SOURCE: Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 56705	A2	19820728	EP 1982-300170	19820113
EP 56705	A3	19820804		
EP 56705	B1	19840926		
R: BE, DE, FR, GB, IT, NL				
WO 8202427	A1	19820722	WO 1982-GB6	19820114
W: JP, US				
PRIORITY APPLN. INFO.:			GB 1981-1262	A 19810115
			EP 1982-300170	A 19820113

AB Polymer membranes for use in heat exchangers and having high wettability are prepared by treating the membrane with an oxidizing agent. Thus, a heat exchange tube of low d. polyethylene [9002-88-4] was treated 1 min with 50% SO₃ in air at 55°. The treated outer surface had surface tension >72 dynes/cm compared with 31 dynes/cm for the untreated inner surface.

L1 ANSWER 68 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1982:544292 CAPLUS

DOCUMENT NUMBER: 97:144292

TITLE: Polymeric reagents. V. Preparation of a new recyclable polymeric oxidizing agent for the oxidation of halides and tosylates into carbonyl compounds
AUTHOR(S): Frechet, Jean M. J.; Darling, Graham; Farrall, M. J.
CORPORATE SOURCE: Dep. Chem., Univ. Ottawa, Ottawa, ON, K1N-9B4, Can.
SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1980), 21(2), 270-1
CODEN: ACPPAY; ISSN: 0032-3934

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Polystyrene-bound trimethylamine oxide (I) was prepared by aminating chloromethylated polystyrene and oxidizing with H₂O₂. I oxidized bromoalkanes, iodoalkanes, and tosylalkanes to the carbonyl compds. in high yields. The reagent could be recycled without loss of activity.

L1 ANSWER 69 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1982:408039 CAPLUS

DOCUMENT NUMBER: 97:8039

TITLE: Applicability of oxidative systems to initiate grafting on and bonding of wood

AUTHOR(S): Philippou, John L.

CORPORATE SOURCE: Forest Prod. Lab., Univ. California, Richmond, CA, USA

SOURCE: Journal of Wood Chemistry and Technology (1981), 1(2), 199-221

CODEN: JWCTDJ; ISSN: 0277-3813

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In the preparation of particleboard, plywood, and laminated panels, surface treatment with H₂O₂, peroxyacetic acid, HNO₃, K₃Fe(CN)₆, and NaCr₂O₇ increased the internal bond (IB) strength and reduced thickness swelling (TS) and H₂O absorption of boards containing furfuryl alc. (I), NH₄ lignosulfonate (II)-maleic anhydride, -H₂CO or -I mixture, and PhOH-I mixture, indicating that in the presence of the oxidants, these polymerizable chems. provide effective chemical bridges between wood surfaces. For the H₂O₂-II-II, IB strength, modulus of rupture, and elasticity increased whereas TS and H₂O absorption decreased with increasing particleboard d. in the range 0.58-0.80 g/cm³. In the grafting of I, II, and I-II mixture on firwood chips in the presence of H₂O₂, grafting percentage increased with increasing H₂O₂ concentration

L1 ANSWER 70 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1982:162257 CAPLUS

DOCUMENT NUMBER: 96:162257

TITLE: Polymer-supported periodate and iodate as oxidizing

agents
 AUTHOR(S): Harrison, Charles R.; Hodge, Philip
 CORPORATE SOURCE: Dep. Chem., Univ. Lancaster, Lancaster, LA1 4YA, UK
 SOURCE: Journal of the Chemical Society, Perkin Transactions
 1: Organic and Bio-Organic Chemistry (1972-1999)
 (1982), (2), 509-11
 CODEN: JCPRB4; ISSN: 0300-922X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 96:162257

AB Periodate forms of macroporous anion-exchange resins were used in protic or aprotic solvents to oxidize quinols, catechols, glycols, Ph₃P, (PhNH)₂, and PhCONHOH. E.g., treatment of 2-chloroquinol with the periodate form of Amberlyst A26 in CHCl₃ for 1 h at 20° gave 96% of 2-chloro-p-benzoquinone. In MeOH, the reagents oxidized thio ethers. Thus, treatment of (PhCH₂)₂S in MeOH with Amberlyst A26 periodate for 16 h at 40° gave 99% (PhCH)₂SO. Polymer-supported iodate also oxidized quinols and catechols.

L1 ANSWER 71 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1981:176242 CAPLUS
 DOCUMENT NUMBER: 94:176242
 TITLE: Poly(vinylpyridinium dichromate): an inexpensive recyclable polymeric reagent
 AUTHOR(S): Frechet, Jean M. J.; Darling, Pauline; Farrall, M. Jean
 CORPORATE SOURCE: Dep. Chem., Univ. Ottawa, Ottawa, ON, K1N 9B4, Can.
 SOURCE: Journal of Organic Chemistry (1981), 46(8), 1728-30
 CODEN: JOCEAH; ISSN: 0022-3263
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A reagent containing dichromate reactive groups was prepared by reaction of divinylbenzene-crosslinked poly(vinylpyridine) with 0.5 molar equivalent of H₂O and 1 molar equivalent of Cr₂O₃. The resulting poly(vinylpyridinium dichromate) resin was very stable and could be used in wet form to oxidize alcs. into the corresponding carbonyl compds. The oxidizing agent was tested with benzylic, allylic, primary and secondary alcs.; in all cases no products of overoxidn. were detected. The main advantages of the reagent are that it can be prepared safely and in quant. yield using molar amts. of a com. available resin, and that it retains firmly all complexed Cr salts in oxidized as well as in reduced forms. Molar ratios of oxidizing agent to alc. as low as 1.1:1 can be used, although, with the less reactive alcs., higher molar ratios are advisable to increase the rate of reaction. The polymer is regenerable without apparent loss of activity.

L1 ANSWER 72 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1980:147822 CAPLUS
 DOCUMENT NUMBER: 92:147822
 TITLE: Bromination of crosslinked vinylaromatic copolymer resins
 INVENTOR(S): Herbin, J.; De Koker, J.; Prsle, P.; Giuliani, M.; Drode, T.; Boutier, J.; Grammont, P.
 PATENT ASSIGNEE(S): Dia-Prosim, Fr.
 SOURCE: Fr. Demande, 8 pp.
 CODEN: FRXXBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2427343	A1	19791228	FR 1978-16244	19780531
FR 2427343	B1	19810410		
IN 151240	A	19830312	IN 1979-CA544	19790528
AU 7947542	A1	19791206	AU 1979-47542	19790529
AU 527046	B2	19830210		
JP 54163993	A2	19791227	JP 1979-66718	19790529
JP 58014441	B4	19830319		

US 4246354	A	19810120	US 1979-42784	19790529
CA 1149550	A1	19830705	CA 1979-328534	19790529
ZA 7902692	A	19800625	ZA 1979-2692	19790530
PRIORITY APPLN. INFO.:			FR 1978-16244	A 19780531

AB Particles of crosslinked divinylbenzene-styrene copolymer (I) are brominated with Br or KBr in the presence of catalysts (e.g., Fe SO₄) and oxidizing agents (e.g., H₂SO₄). The oxidizing agent oxidizes HBr formed during bromination, preventing the evolution of HBr and minimizing the consumption of brominating agent. Brominated I has a high d. and is used to prepare ion exchangers. Thus, 52 g 3:97 I (particle size 0.55 mm, d. 1.10), 25 mL C₂H₄Cl₂, 0.01 mol FeSO₄, and 150 mL 95% H₂SO₄ are treated slowly with 13 mL Br at 30°, chloromethylated, and aminated to give an ion exchanger with exchange capacity 3.90 equiv/kg and d. 1.228.

L1 ANSWER 73 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1979:40321 CAPLUS
DOCUMENT NUMBER: 90:40321
TITLE: Coating metals
INVENTOR(S): Steinbrecher, Lester; Hall, Wilbur S.
PATENT ASSIGNEE(S): Amchem Products, Inc., USA
SOURCE: U.S., 16 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 9
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4104424	A	19780801	US 1974-499039	19740820
US 3585084	A	19710615	US 1969-791801	19690116
US 4373050	A	19830208	US 1980-157526	19800609
PRIORITY APPLN. INFO.:			US 1966-554336	A2 19660601
			US 1969-791801	A3 19690116
			US 1971-113685	A2 19710208
			US 1974-499039	A3 19740820
			US 1978-904019	A1 19780508

AB Steel is dipped in acidic aqueous polymeric coating dispersions containing oxidizing agents and HF to provide nonelectrophoretic coatings whose thickness increases with increasing immersion time. Thus, steel panels were immersed 2 min at 25° in 1 L aqueous composition containing butadiene-styrene copolymer [9003-55-8] 50, H₂O₂ 1.5, and HF 2.1 g and dried with or without rinsing to provide coatings with excellent adhesion.

L1 ANSWER 74 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1977:123918 CAPLUS
DOCUMENT NUMBER: 86:123918
TITLE: Solid propellant
PATENT ASSIGNEE(S): Rockwell International, Japan
SOURCE: Jpn. Tokkyo Koho, 6 pp.
CODEN: JAXXAD
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 51032686	B4	19760914	JP 1966-59973	19660912
PRIORITY APPLN. INFO.:			JP 1966-59973	19660912

AB Solid propellants having good mech. properties and high loading ability are made from a fuel, **oxidizing agent**, and **polymer** binder prepared by reacting telechelic-type linear polybutadiene [9003-17-2] having terminal carboxy groups with vinylcyclohexene diepoxide [106-87-6] or 1,3-bis[3-(2,3-epoxy-propoxy)propyl]tetramethyldisiloxane (I) [126-80-7]. Thus, a typical propellant contained NH₄ClO₄ 1650, Al 400, MAPO 5, and I-modified linear polybutadiene 445 g.

L1 ANSWER 75 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1976:463998 CAPLUS
DOCUMENT NUMBER: 85:63998
TITLE: Insoluble oxidation reagent
INVENTOR(S): Weinshenker, Ned M.
PATENT ASSIGNEE(S): Dynapol, USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3959190	A	19760525	US 1974-479654	19740617

PRIORITY APPLN. INFO.: US 1974-479654 A 19740617

AB Polymeric sulfide oxidation reagents for the oxidation of alcs. are manufacture by treating brominated polystyrene [9003-53-6] with methyl disulfide [624-92-0]. Thus, polystyrene was brominated in the presence of thallic acetate and treated with methyl disulfide in the presence of BuLi to give a methylmercapto-modified polystyrene. The polymer product was treated with Cl and the sulfonium ion addition product was contacted with octanol [111-87-5] to provide a 95% yield of octanal [124-13-0].

L1 ANSWER 76 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1970:44290 CAPLUS
DOCUMENT NUMBER: 72:44290
TITLE: Oxidative coupling of some 2,6-disubstituted phenols
AUTHOR(S): Bruce, J. Malcolm; Paulley, S. E.
CORPORATE SOURCE: Dep. Chem., Univ. Manchester, Manchester, UK
SOURCE: Polymer (1969), 10(8), 701-5
CODEN: POLMAG; ISSN: 0032-3861
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The oxidative coupling of several 2,6-disubstituted phenols by means of O-CuCl-C5H5N, MnO2, Ag2O, and PbO2 to yield poly(phenylene ethers) and/or 4,4'-diphenoquinones is described. Although there are exceptions, PbO2 is the most generally useful **oxidizing agent** for **polymer** formation; Ag2O is particularly useful for preparing 4,4'-diphenoquinones.

L1 ANSWER 77 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1969:47023 CAPLUS
DOCUMENT NUMBER: 70:47023
TITLE: Formation of p-benzoquinones in the oxidation of poly(phenylene ethers)
AUTHOR(S): Finkbeiner, Herman; Toothaker, Anne T.
CORPORATE SOURCE: Gen. Elec. Res. and Develop. Center, Schenectady, NY, USA
SOURCE: Journal of Organic Chemistry (1968), 33(12), 4347-51
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A number of oxidizing agents attack poly(phenylene ethers) in HOAc to produce either 4-acetoxyphenols (I) or p-benzoquinones (II). The nature of the final product depends on the ratio of **oxidizing agent** to **polymer**, since I are initially formed and subsequently oxidized to II. A mechanism is proposed for the reaction. 12 references.

L1 ANSWER 78 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1967:482458 CAPLUS
DOCUMENT NUMBER: 67:82458
TITLE: Preparation and polymerization of a sugar dithiol
AUTHOR(S): Whistler, Roy L.; Hoffman, Daniel Joseph
CORPORATE SOURCE: Purdue Univ., Lafayette, IN, USA
SOURCE: Journal of Polymer Science, Polymer Chemistry Edition (1967), 5(8), 2111-17
CODEN: JPLCAT; ISSN: 0449-296X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB 2,4-O-Benzylidene-1,6-dithiol-D-glucitol is prepared by nucleophilic displacement of tosyloxy groups from 3,5-di-O-acetyl-2,4-O-benzylidene-1,6-di-O-tosyl-D-glucitol with thioacetate in N,N-dimethylformamide and deacetylation of the product. Oxidative polymerization with O and SeO₂ produces film-forming disulfide polymers with intrinsic viscosities up to 0.41. Other oxidizing agents produce polymers of lower viscosity. Condensation of the dithiol with BzH also gives polymers of low viscosity.

L1 ANSWER 79 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1966:413200 CAPLUS
DOCUMENT NUMBER: 65:13200
ORIGINAL REFERENCE NO.: 65:2473b
TITLE: Paper from acrylonitrile polymer fibers
PATENT ASSIGNEE(S): Chemstrand Ltd.
SOURCE: 18 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 664917		19651203	BE	
FR 1439376			FR	
PRIORITY APPLN. INFO.:			GB	19640603

AB Fibers formed from acrylonitrile (I) polymer containing at least 80 weight % of I are cut to a length of about 2.5 cm., treated at 10-100° with a solution of an oxidizing agent, such as KMnO₄ or NaOCl, washed, and formed into sheets. The resultant paper has improved tear and burst properties.

L1 ANSWER 80 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1963:27873 CAPLUS
DOCUMENT NUMBER: 58:27873
ORIGINAL REFERENCE NO.: 58:4706b-c
TITLE: Perfluorocarbon structures treated to promote adhesion
INVENTOR(S): Cheshire, John R.
PATENT ASSIGNEE(S): E. I. du Pont de Nemours & Co.
SOURCE: 6 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3063882		19621113	US	19580613

AB Films, sheets, tapes, or other shaped structures are heated to ≥150° in the presence of an oxidizing agent and an amine. Thereafter, excellent adhesion is obtained by cementing to any desired surface. Thus, a film 0.002 in. + 1 in. + 4 in. of a copolymer (82-6% C₂F₄ and 14-18 C₃F₆) was put in a stainless-steel tube with 200 ml. EtNH₂ and an air space. The tube was sealed and heated 6 hrs. at 200°. When removed, the film surface was wettable with H₂O. The treated film was cemented to a Cu surface with R 313 epoxy resin adhesive and pressed 30 min. at 100° under 75 lb./sq. in. After cooling, peeling on an Instron tester showed adhesion of ≥3 lb./in. width and greater than the breaking strength of the film. Solid or liquid oxidizing agents, flame, hot roll, hot plate, continuous or batch treatments can be used. Overheating and charring of the polymer must be avoided. After treatment, various com. adhesives, e.g. rubber, acrylate, or silicone based, are satisfactory, and adhesion is obtained to glass, cellulosic structures, or plastics. Cf. following abstract

L1 ANSWER 81 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1962:50787 CAPLUS
DOCUMENT NUMBER: 56:50787
ORIGINAL REFERENCE NO.: 56:9615a-b
TITLE: Polyalkene film with hydrophilic surface
INVENTOR(S): De Keyser, Lodewijk F.
PATENT ASSIGNEE(S): Gevaert Photo-Producten N. V.

DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 580570		19591102	BE	
DE 1188436			DE	
PRIORITY APPLN. INFO.:			GB	19580714

AB The surface of polyalkene films, such as polypropene film, is rendered hydrophilic by hot treatment with oxidizing agents, such as K₂Cr₂O₇ or CrO₃, in H₂SO₄, rinsing and applying a layer or printing on it before the film is completely dry. The presence of organic acids such as HOAc during the oxidation enhances the adhesive power of the surface treated. Drying can be done with EtOH. A polypropene film treated with K₂Cr₂O₇ and provided with a gelatin substratum is treated with a solution composed of 30% colloidal SiO₂ 140 cc., H₂O 100, 1% AuCl₃ 10, 0.1% SnCl₂ 10, and EtOH 750. This film is used as receiving material in the Ag halide diffusion-transfer process.

L1 ANSWER 82 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1959:10402 CAPLUS
DOCUMENT NUMBER: 53:10402
ORIGINAL REFERENCE NO.: 53:1929c-e
TITLE: Photochemical electron transfer and some related phenomena in aqueous solutions of reducing ions containing polymerizable monomers
AUTHOR(S): Dainton, F. S.; James, D. G. L.
CORPORATE SOURCE: Univ. Leeds, UK
SOURCE: Transactions of the Faraday Society (1958), 54, 649-63
CODEN: TFSOA4; ISSN: 0014-7672
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB cf. C.A. 49, 15392d. Visible and ultraviolet absorption spectra were determined for aqueous solns. of a range of cationic and anionic species and also mixts. with vinyl compds. The oxidation-reduction potential was determined in various noncomplexing acid media in the presence and absence of one or more monomeric water soluble vinyl compds., where necessary under conditions of rigorous deaeration. The min. value of the quantum necessary for the reaction (I), $Mz+.H_2O + hv \rightarrow M(z+1)+ + OH^- + H$, increased linearly with ionization potential. A small ionization potential made M₂+aq more effective as a reducing agent for polymer radicals and O and M(z+1)+aq less effective as an **oxidizing agent** for **polymer** radicals. Acrylonitrile complexed strongly with V⁺⁺, displacing the electron transfer spectrum .apprx. 500 A. to shorter wave lengths, and slightly with Fe⁺⁺ and Co⁺⁺; acrylates formed no complexes. When M(z+1)+ was capable of photoreduction, a photostationary state was established balancing reaction I. O formed a reduction activation system with V⁺⁺, V⁺⁺⁺, and Mo⁺⁺⁺.

L1 ANSWER 83 OF 84 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1956:75946 CAPLUS
DOCUMENT NUMBER: 50:75946
ORIGINAL REFERENCE NO.: 50:14266d
TITLE: Purification of fluorine-containing polymers
INVENTOR(S): Barnhart, Wm. S.; Mantell, Russell M.
PATENT ASSIGNEE(S): M. W. Kellogg Co.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2751376		19560619	US	

AB The effectiveness of acids in purifying F-containing polymers is enhanced by the presence of a strong oxidizing agent and small amts. of water. Thus, 40 g. poly(trifluorochloroethylene), refluxed with 190 ml. AcOH, 10 g. H₂O, and 10 g. CrO₃ for 48 hrs. degraded from a viscosity of 0.69 to 0.62 in 24 hrs. at 275°. Cf. preceding abstract

ACCESSION NUMBER: 1953:50238 CAPLUS
DOCUMENT NUMBER: 47:50238
ORIGINAL REFERENCE NO.: 47:8472g-i,8473a-g
TITLE: Electron-exchange polymers. IV. Countercurrent applications
AUTHOR(S): Cassidy, Harold G.; Ezrin, Myer; Updegraff, Ivor H.
CORPORATE SOURCE: Yale Univ.
SOURCE: Journal of the American Chemical Society (1953), 75, 1615-17
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Polymers of III alone, with PhCMe:CH₂, and with PhCH:CH₂ cross-linked with divinylbenzene can be used to effect reduction. The polymer becomes oxidized in the process and then becomes capable of acting as an oxidizing agent. This was shown by impregnating filter-paper disks with polymeric III and applying the reagents by the technique of radial chromatography, and also on columns, in which V was supported on filter aid, by percolating the solution of the substance to be oxidized or reduced. These reductor or oxidizer columns have the advantage that they do not contaminate the reagent solns. except for the effect on the H⁺ concentration. Since the linear polymers must preferably be supported on a carrier to make the reactive groups accessible, the polymer was dissolved in a min. amount of 90% AcOH, and for qual. work filter paper, and for quant. work diatomaceous earth, was impregnated with the solution. Thus, 46 mg. poly-III was dissolved in about 1.5 cc. 90% AcOH and 4 5.5-cm. disks of Whatman Number 1 filter paper were soaked with the solution consuming about 3/4 of the solution; thus each disk contained about 0.12 meq. of polymer, or about 0.006 meq./sq. cm. A dry disk was placed between 2 glass plates (the upper one having a small hole at the center for introducing the reagents), a few drops aqueous 0.05N FeCl₃ were run into the paper, the resulting orange zone of oxidized polymer was washed free from the reagent with a few drops N H₂SO₄, the top plate removed, and the paper streaked with ferricyanide, 1-nitroso-2-naphthol, and 2, 2'-bipyridine; this showed that all the ferric ion was reduced to ferrous ion. Fresh ferricyanide solution in a pH 6.6 phosphate buffer was introduced similarly into a paper disk, and the resulting pink zone (3 cm. diameter) washed with buffer until the zone was 6 cm. in diameter and streaked with AgNO₃, ferric, ferrous, and cupric ion; this showed reduction to ferrocyanide. A small drop of iodine in aqueous KI at pH 6.4 or 7 was placed on the paper, and the brownish black zone was washed with fresh buffer until the color disappeared; at this point the paper did not give a test for free iodine; a similar paper did not show any reaction with N H₂SO₄, but when a drop of dilute KI in N H₂SO₄ was run into the paper, the iodide was immediately oxidized to iodine by the oxidized polymer. V (14.945 mg.) was dissolved in 3 cc. 90% AcOH, the solution mixed with 250 mg. filter-aid (previously exhaustively extracted with petr. ether, dried, and ignited), the slurry poured with stirring into 30 cc. H₂O, mixed with addnl. 250 mg. filter-aid, and poured into a tube (1.3 cm. diameter) on a 0.5 g. filter-aid, and the column bathed overnight in KI-HCl solution to give a pale pink column containing 0.117 meq. oxidation-reduction capacity. The column was washed with 1 cc. H₂O, then 1 cc. pH 7.8 phosphate buffer and treated with a mixture of 10 cc. 0.0155N iodine in KI and 10 cc. buffer and washed with 1 + 5 + 3 cc. H₂O; iodine reduced was 0.122 meq. The column was then treated with 5 cc. 5% aqueous KI + 5 cc. 8N HCl and washed with 1 cc. H₂O and then 9 cc. 0.1N HCl to produce 0.117 meq. iodine. The column was then put through the same cycle to reduce 0.105 meq. iodine and then produce 0.098 meq. The column was then washed with 20 cc. 0.1N HCl to remove all traces of iodine and iodide, treated with 10 cc. 0.0179N K₂Cr₂O₇ + 2 cc. 8N HCl, and treated with 5 + 5 cc. 0.1N HCl; 0.106 meq. dichromate was reduced. The oxidized column was then treated with KI-HCl to produce 0.122 meq. iodine, kept 2.5 days under acid KI, treated without washing with 0.0179N K₂Cr₂O₇ + an equal volume 0.1N HCl, and the thus oxidized column treated with 136.0 mg. Fe(NH₄)₂(SO₄)₂·6H₂O in 10 cc. 0.1N HCl to oxidize only 0.019 meq. ferrous ion. The column with this slight degree of reduction showed no detectable reducing action on a solution of 0.0537N ferric ion in an equal volume 5.5N HCl. After all the ferric ion had been washed from the column with 5 + 5 cc. 0.1N HCl, it was treated with 10 cc. 5% aqueous KI + 10 cc. 0.1N HCl to

produce 0.019 meq. iodine; treated then with iodine in pH 7.8 buffer, it used only 0.028 meq., and a recycle with acid KI produced 0.032 meq. iodine. A similar exchanger column with 19.115 mg. III-styrene-divinylbenzene cross-linked polymer treated with acid KI produced 0.0015 meq. iodine; the column treated with 10 cc. 0.0153N iodine in 10 cc. pH 7.8 buffer reduced 0.127 meq. iodine; since the amount polymer taken for the preparation of the column was equivalent to 0.159 meq., about 80% of the groups were available; when the column was treated with acid KI, with use of slight pressure to accelerate the flow about 10-fold, only 0.019 meq. iodine was produced. A column made up under the same conditions as that with V with 15.65 mg. p-C6H4(OH)2 and treated with iodine at pH 7.8 reduced only 0.005 meq. and, when subsequently treated with acid KI, showed only 0.001 meq. quinone.

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